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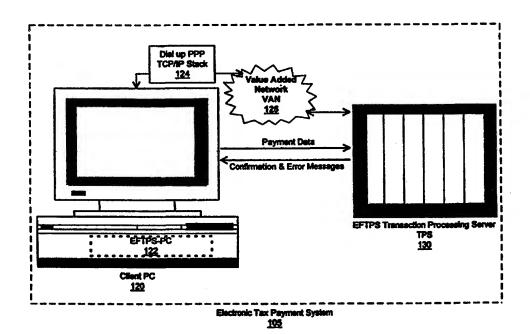
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(57) Abstract

According to the invention, a method and apparatus are provided for facilitating the interactive entry and validation of data prior to electronic submission to a tax system, such as the Electronic Federal Tax Payment System (EFTPS). Embodiments of the invention run on a personal computer and collect the data for multiple tax payments by means of an interactive graphical user interface. Embodiments of the invention include data editing capabilities, data validation, and payment data reports. Embodiments of the invention include a communications module that transmits payment data to the EFTPS and receives a confirmation or error message in response.

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INTERACTIVE TAX PAYMENT SYSTEM

Field of the Invention

The present invention relates to the entry of tax data into a computer system and, more particularly, to the interactive entry and validation of multiple tax payment transactions prior to submission to an electronic tax payment system.

Background of the Invention

The Electronic Federal Tax Payment System (EFTPS) is an automated system for remitting federal tax payments to the Internal Revenue Service (IRS). The EFTPS accepts and processes information for all types of federal tax payments from individuals, businesses, and third party filers (e.g., payroll processors, banks, or other fiduciaries that specialize in tax preparation and payment submittal on behalf of others). The IRS and the Federal Management Service selected two banks to implement the EFTPS. Each bank, acting as a Treasury Financial Agent (TFA), has jurisdiction over a specific geographic region. Based on their principle location, electronic filers are assigned to the TFA that handles the region in which the filer is located. Each TFA operates a Transaction Processing Server (TPS) on which its EFTPS application runs. The EFTPS application accepts electronic payments, passes the payment details to the IRS, and initiates the electronic transfer of funds into the United States Treasury account.

Prior to remitting federal tax payments electronically, a taxpayer must be enrolled in the system. Once enrolled, the taxpayer (or a third party filer acting on the taxpayer's behalf) uses a front end interface to the EFTPS to submit the information necessary to make payments. Several front end interfaces are presently available for communicating with the EFTPS.

One interface, the "Audio Response Unit" (ARU), accepts payment data over a touch tone telephone. The ARU collects the data related to a single payment through a series of prompts. Each payment transaction takes about two to three minutes to complete. Therefore, while the ARU can accept multiple transactions in one session, it is an inefficient system for third party filers who submit more than ten transactions per day.

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Other front end interfaces to the EFTPS are available to third party filers for electronically submitting multiple transactions that have been previously entered into a computer system. One computer system, based on EDI, is available to "bulk filers" who submit more than 1,000 payment transactions on a peak day. Another computer system, which imports and transmits ASCII text files over a Value Added Network, is recommended for "batch filers" who submit payments for at least fifty taxpayers enrolled in EFTPS.

Neither of these systems, however, provides for interactive data entry or error detection and correction. Without such interactive capabilities, input errors can easily go undetected until after a large set of data is entered and validated, either manually or by a separate computer program. This process can be inefficient because data entry personnel must alternate between data entry and data validation until all errors are detected and corrected. Examples of data entry errors include missing required data entries, invalid tax form numbers, invalid combinations of tax form and payment period, payment detail amounts not totaling payments, and invalid requested settlement dates.

Accordingly, there is a need for an improved interface for the electronic submission of input to a tax system that offers advantages over other interfaces.

Summary of the Invention

According to the invention, a method and apparatus are provided for facilitating the interactive entry and validation of data prior to electronic submission to a tax system, such as the Electronic Federal Tax Payment System (EFTPS). Embodiments of the invention run on a personal computer and collect the data for multiple tax payments by means of an interactive graphical user interface.

Embodiments of the invention include data editing capabilities, data validation, and payment data reports. Embodiments of the invention include a communications module that transmits payment data to the EFTPS and receives a confirmation or error message in response.

Certain embodiments of the invention offer many advantages including, without limitation, the following:

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- a system for interactively accepting and validating data input comprising tax payment transactions;
- a system for viewing and editing previously entered data input comprising tax payment transactions;
- a system for sending data input comprising tax payment transactions for subsequent processing;
 - a system for importing data comprising tax payment transactions in batch mode from a pre-defined file;
 - a system for exporting previously entered data comprising tax payment transactions to an archival file;
 - a system for administering multiple levels of access to data comprising tax payment transactions;
 - a system for receiving immediate notification regarding status of submitted tax payment transactions; and
 - a system incorporating communications software configured to connect with the EFTPS.

These and many other advantages of certain embodiments of the invention will become apparent to those skilled in the art from the detailed description below.

Brief Description of the Drawings

- An understanding of one or more embodiments of the invention may be gained by considering the following detailed description in conjunction with the accompanying drawings, in which:
 - FIG. 1 illustrates a high level diagram of an embodiment of an electronic tax payment system in which the invention might operate.
- FIG. 2 illustrates an example of the structure of a "business event" that an embodiment of the invention might use to submit data for a tax payment to an electronic tax payment system.
 - FIG. 3 illustrates an example of the structure of a "remote message block" that an embodiment of the invention might use to submit one or more business events to an electronic tax payment system.

- FIG. 4 shows a flow diagram of an example of a communications interaction between a client personal computer implementing an embodiment of the invention and a transaction processing server of an electronic tax payment system.
- FIG. 5 shows a flow diagram of the major functions of one embodiment of the invention.
 - FIG. 6 illustrates an example of an "enter payments" screen that an embodiment of the invention might use to obtain tax payment data from a user.
 - FIG. 7 illustrates an example of a "summary view" screen that an embodiment of the invention might use to display a summary of previously entered tax payment data.
 - FIG. 8 shows a flow diagram of the unsent payments procedure of one embodiment of the invention.
 - FIG. 9 shows a flow diagram of the send procedure of one embodiment of the invention.
- FIG. 10 shows a flow diagram of the file import procedure of one embodiment of the invention.
 - FIG. 11 shows a flow diagram of the file export procedure of one embodiment of the invention.

Detailed Description of Preferred Embodiment(s)

Payment System 105 in which the present invention might operate. Electronic Tax Payment System 105 includes any number of client personal computers (PCs), one of which is illustrated by Client PC 120. EFTPS-PC 122 is a software application that taxpayers and third party filers can use to exchange information electronically with the Electronic Federal Tax Payment System (EFTPS). In Electronic Tax Payment System 105, an embodiment of EFTPS-PC 122 is installed on Client PC 120. EFTPS-PC 122 communicates with an EFTPS Transaction Processing Server (TPS), one of which is illustrated by TPS 130. Communications between EFTPS-PC 122 and TPS 130 take place over a Value Added Network (VAN) 125, such as one operated by CompuServe or MCI, using a dial up point to point protocol (PPP) Transmission Control Protocol/Internet Protocol (TCP/IP) stack 124. Those skilled in

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the art understand that TPS 130 could also be referred to as a "host," that other communications protocols accepted by TPS 130 could be used, and that EFTPS-PC 122 could exchange information electronically with any electronic tax payment system (*e.g.*, a state or local system).

Herein, the term "user" refers to a third party filer using EFTPS-PC 122. The following sections discuss the communications protocol and process that EFTPS-PC 122 uses to communicate with TPS 130 and describe in detail how EFTPS-PC 122 is implemented and operated by a user on Client PC 120.

1. COMMUNICATIONS PROTOCOL

This section describes the communications protocol that EFTPS-PC 122 and TPS 130 use to exchange data, which is referred to herein as "tax data." The systems exchange tax data in units that are referred to herein as "transactions" or "business events," such as Business Event (BE) 210, illustrated in FIG. 2. In addition to tax data, Business Event 210 includes information that the systems use to process the tax data.

Business Event 210 includes two components: a header component (*e.g.*, BE Header 212) and a data component (*e.g.*, BE Data 214). A Business Event 210 that EFTPS-PC 122 sends to TPS 130 includes tax data for processing (a "send Business Event 210"). A Business Event 210 that TPS 130 sends in response (a "response Business Event 210") includes a return code that indicates the status of the corresponding send Business Event 210. EFTPS-PC 122 and TPS 130 exchange one or more business events, such as Business Event 210, in a Remote Message Block (RMB) 310, such as the one illustrated in FIG. 3. The format and content of RMB 310 and Business Event 210 are discussed in detail in the following sections.

1.1 Remote Message Block

Referring to FIG. 3, RMB 310 includes Transmission Header 312 and one or more Business Events 210, each including BE Header 212 and BE Data 214. EFTPS-PC 122 observes the following rules in building and transmitting RMBs 310 to TPS 130:

 RMB 310 sent by EFTPS-PC 122 should not exceed 4k bytes in size (this limit does not apply to RMB 310 sent by TPS 130).

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- Business Event 210 should not span multiple RMBs 310.
- A maximum of 10 Business Events 210 should be included in each RMB 310.
- A maximum of 100 Business Events 210 should be included in each transmission (a minimum of 10 Business Events 210 is recommended).

Following these rules, EFTPS-PC 122 typically transmits between 1 and 10 full RMBs 310 in one communications session with TPS 130. Those skilled in the art will appreciate that these rules are not EFTPS-PC 122 requirements; rather, the rules reflect TPS 130 specifications. For example, the limit of 100 Business Events 210 per transmission is imposed by TPS 130 to ensure that one user does not monopolize a communications line for extended periods of time. Embodiments of EFTPS-PC 122 could send more than 100 Business Events 210 in a communications session. Similarly, embodiments of EFTPS-PC 122 could build an RMB 310 containing more than 10 Business Events 210.

Transmission Header 312 consists of information that is required in every RMB 310 transmission to facilitate the movement of RMB 310 to and from TPS 130. The following table illustrates the format and content of Transmission Header 312. A more detailed description of each of the fields follows the table.

Table A: Transmission Header

	Table A: Transmission fleater						
Field	Type	Length	Sent to TPS	Received from TPS			
Transmit	Character	4	BB10	BB10			
Constant	String						
Return	Character	4	0000	Return status			
Code	String			of RMB			
Next in	Character	1	0	0=last in			
Chain ID	String			chain			
				1=first &			
				middle			
Character	Binary	1	x'00'(hex)=	x'00'(hex)=			
Set			EBCDIC	EBCDIC			
		1	x'01'(hex)=	x'01'(hex)=			
			ASCII	ASCII			
CRC	Binary	4	Calculated	Calculated			
			value (hex)	value (hex)			
Sequence	Character	4	Sequence of	same as sent			
Number	String		RMB				

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			0000-9999	
Vendor ID	Character	8	Vendor	same as sent
Number	String		Certification	
			ID	
Date/Time	Character	14	YYYYMM	same as sent
Stamp	String		DDHHMISS	
			of transaction	
Reserved	Character	2	00	00
	String			
Data	Character	12	Total size of	Total size of
Length	String		remote	remote
			message	message
			blocks in	blocks in
			bytes	bytes

Transmit Constant is an identification used by TPS 130 to detect the type of communications service being conducted; EFTPS-PC 122 sets the value to BB10.

Return Code is returned by TPS 130 as "0000" to indicate acceptance of the transaction or another number indicating an error; EFTPS-PC 122 sets the value to "0000." A list of return codes is provided in the following table.

Next in Chain ID is set to 0 by EFTPS-PC 122; TPS 130 can return messages that are over the 4k bytes limit and, therefore, be forced to break RMB 310 into sections. A "1" indicates that this is the first or middle part of this chain and a "0" indicates that this is the end.

Character Set designates the type of data string. This is a binary field. A hexadecimal value of x'00' indicates EBCDIC and a value of x'01' indicates ASCII.

Cyclic Redundancy Code (CRC) is an additive checksum calculation binary number. The CRC is generated on the content of RMB 310 following Transmission Header 312. The CRC must conform to the CCITT CRC-32 Cyclic Redundancy Check standard.

Sequence Number is defined by EFTPS-PC 122; RMB 310 sent in response by TPS 130 has the same sequence number.

Vendor ID Number is a certification number provided to a software vendor whose support capabilities and embodiment of EFTPS-PC 122 satisfy minimum requirements set by the Treasury Financial Agent. TPS 130 will reject any payment made by a non-certified EFTPS-PC 122.

5 Date/Time Stamp must be made in the

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YYYY(year)MM(month)DD(day)HH(hour) MI(minute)SS(Second) format to designate the time of transmission.

Reserved is currently not used but is set aside for possible additional data.

Data Length is the total number of bytes of RMBs 310 that follow

Transmission Header 312 (i.e., not including Transmission Header 312).

Table B: Transmission Header Return Codes

0000SuccessfulC001Invalid Routing InformationC002Invalid Character SetC003Invalid CRCC004Invalid Vendor ID	Return Code	Return Code Description
C002 Invalid Character Set C003 Invalid CRC	0000	Successful
C003 Invalid CRC	C001	Invalid Routing Information
	C002	Invalid Character Set
C004 Invalid Vendor ID	C003	Invalid CRC
invalid velidor ip	C004	Invalid Vendor ID
C005 Invalid Sequence Number	C005	Invalid Sequence Number
C006 Invalid Date / Time Stamp	C006	Invalid Date / Time Stamp
C007 Invalid Data Length	C007	Invalid Data Length

1.2 Business Event Header

Every Business Event 210 comprises one BE Header 212 and one

15 BE Data 214. BE Header 212 provides the information that defines every Business Event 210 within an RMB 310. The following table illustrates the format and content of Business Event 210. A more detailed description of each of the fields follows the table.

Table C: Business Event Header

Field	Туре	Length		Received from TPS
Application and	Character	6	EFTPS_(_is a	EFTPS_(_is
System			space)	a space)
Business Event	Character	6	P200HA	P200HA
Remote Version	Character	8	01000000	same as sent
Sequence	Character	4	Sequence of	same as sent
Number			Business Events	

			0000-9999	
Date/Time	Character	14	YYYYMMDDH	same as sent
Stamp			HMISS date	
			format	
Reserved	Character	2	00	00
Encryption/	Character	2	00	00
Decryption ID				
Compression ID	Character	2	00	00
Site	Character	8	Login site	same as sent
Identification				
Login	Character	8	00000000	same as sent
Identification		,		
Return Code	Character	4	0000	Return status
				of BE
Data Format	Character	2	00	00
Data Length	Character	6	Length of	Length of
			Business Event	Business
			Data in bytes	Event
				Response in
				bytes

Application and System is a constant that instructs TPS 130 that this is an EFTPS Business Event 210.

Business Event is a constant that instructs TPS 130 that this is a tax payment Business Event 210.

Remote Version is a constant that indicates the version level of the EFTPS Interface Specification implemented by EFTPS-PC 122.

Sequence Number is assigned by EFTPS-PC 122 and is a unique ID for each Business Event 210. It designates the order of Business Event 210 within RMB 310. It is important to note that Business Events 210 within RMB 310 may not be passed back from TPS 130 in the same order sent by EFTPS-PC 122. Therefore, EFTPS-PC 122 must be capable of using the sequence numbers of BE Header 212 to re-order Business Events 210.

Date/Time Stamp must be made in the

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15 YYYY(year)MM(month)DD(day)HH(hour) MI(minute)SS(second).

Reserved is currently not used but is set aside for possible additional data.

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Encryption/Decryption ID is set to "00" as no encryption is used for Business Event 210 (currently TPS 130 does not support any encryption methods).

Compression ID is set to "00" as no compression is used for Business

Event 210 (currently TPS 130 does not support any compression methods).

Site Identification is a string that identifies the physical location of the system sending the transaction (currently TPS 130 does not use this information).

Login ID is provided to identify individual networked users at a site.

Return Code is returned by TPS 130 as a "0000" to indicate acceptance of the transaction or another number indicating an error; EFTPS-PC 122 sets the value to "0000." A list of return codes is provided in the following table.

Data Format is set to "00" by EFTPS-PC 122.

Data Length is the total number of bytes in BE Data 214.

Table D: Business Event Header Return Codes

Return Code	Return Code Description
0000	Successful
0004	Data Field Error - Correct and Retry
0008	Business Event Not Processed - Retry
0012	Business Event Failed - Fatal Error - Contact
	Customer Service
C101	Invalid Application System
C102	Invalid Business Event
C103	Invalid Remote Version Number
C104	Invalid Sequence Number
C105	Invalid Date/Time Stamp
C106	Invalid Encryption Method ID
C107	Invalid Compression Method ID
C108	Invalid Site ID
C109	Invalid Logon ID
C110	Invalid Data Format
C111	Invalid Data Length
C112	Meta Data Error

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1.3 Business Event Data

As discussed above, every Business Event 210 comprises one BE Header 212 and one BE Data 214. The data in BE Data 214 is organized as a series of fields, with

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each field structured as a "data information block." The following table,"
Table E: Data Information Block," illustrates the format of a data information block.
"Table F: Send Business Event Data" provides details about the content of data information blocks containing tax data in a send Business Event 210 sent by
EFTPS-PC 122. The section entitled "Enter Function" includes details about how
EFTPS-PC 122 obtains and stores this tax data. "Table G: Send Business Event Data

EFTPS-PC 122 obtains and stores this tax data. "Table G: Send Business Event Data Example" includes examples of tax data values. "Table H: Response Business Event Data" provides details about the content of data information blocks containing response data in a response Business Event 210 sent by TPS 130.

Table E: Data Information Block

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Field	Туре	Length	Sent to TPS	Received from TPS
Data Tag	Character String	4	Field ID	Field ID
Data Format	Character String	1	0	0
Data Length	Character String	4	Length of field	Length of field
Data Stream	Character String	Data Length	Data being passed	Data being passed

Data Tag is the data tag ID for the field being passed. The following table,
"Table F: Send Business Event Data" provides examples of data tags.
Data Format is the format of the data. Currently all values for this field are 0.
Data Length is the length of the data stream in bytes. The following table,
"Table F: Send Business Event Data" provides examples maximum allowable lengths.

Data Stream is the value of the field being sent.

Table F: Send Business Event Data

Field	Data Tag	Data Format	Max. Length	Optional	Default
TIN	1401	0	9	N	0
PIN	1402	0	4	N	0
Tax Type	1403	0	4	N	0
Payment Reason	1404	0	1	N	7
Filing Period	1405	0	4	N	0
Payment	1406	0	10	N	0

Amount					
Payment	1407	0	1	Y	+
Amount Sign	} :				
Verification	1408	0	2	N	0
Code					
Settlement Date	1409	0	6	N	0
Overrides:					
Tax Type	1410	0	1	Y	(none)
Threshold	1411	0	1	Y	(none)
Duplicate Pmt	1412	0	1	Y	(none)
FUTA	1413	0	1	Y	(none)
Filing Period	1414	0	1	Y	(none)
Sub-category:					
Count	1415	0	2	N	0
Code	1500-	0	3	Y	0
	1549				
Amount	1550-	0	10	Y	0
	1599				
Amount Sign	1450-	0	1	Y	+
	1499				

The following table includes sample tax payment field data. EFTPS-PC 122 constructs one data information block for each field. EFTPS-PC 122 derives the Tax Type and Payment Reason fields from a five digit Tax Code that represents the combination of the Tax Form and Reason Code entered by the user. For example, if the user enters "706GS(D)" as the Tax Form and "7" as the Reason Code, the applicable Tax Code is "70627." EFTPS-PC 122 uses the first four digits of the Tax Code (*i.e.*, "7062") for the Tax Type and the fifth digit (*i.e.*, "7") for the Reason Code. Examples of five digit Tax Codes are given in the Tax Code Conversion tables in "Appendix A: Tax Form Reference Information." Details regarding data entry are included in the section entitled "Enter Function."

Table G: Send Business Event Data Example

Field	Value
TIN	123456789
PIN	1234
Tax Type	1040
Payment Reason	7
Filing Period	1296
Payment Amount	\$150.00

Payment Amount Sign	+	
Verification Code	11	
Settlement Date	123196	,
Overrides:		~
Tax Type	N	
Threshold	N	
Duplicate Payment	N	
FUTA	N	
Filing Period	N	
Sub-category:		
Count	02	
Code (1)	014	
Amount (1)	\$50.00	
Amount Sign (1)	+	
Code (2)	022	<u> </u>
Amount (2)	\$100.00	
Amount Sign (2)	+	****

TPS 130 responds to RMB 310 sent from EFTPS-PC 122 by sending a corresponding RMB 310 including response Business Events 210 that indicate a successful or unsuccessful transaction. As in a send Business Event 210, the data in BE Data 214 of a response Business Event 210 is organized in one or more data information blocks. The following table, "Table H: Response Business Event Data" provides examples of the content of data information blocks in a response Business Event 210 sent from TPS 130. It is important to note that Business Events 210 within RMB 310 sent from TPS 130 may not be in the same order as the corresponding Business Events 210 sent by EFTPS-PC 122. Therefore, EFTPS-PC 122 uses the sequence numbers in BE Header 212 to re-order Business Events 210.

Each response Business Event 210 contains one of the following: (1) an EFT number (BE Header 212 return code will be zero), (2) an EFT number with a settlement date (BE Header 212 return code will be zero), or (3) an error return (BE Header 212 return code will be non-zero). When a response Business Event 210 contains a non-zero return code, EFTPS-PC 122 can look up the corresponding message text in a table (*e.g.*, "Table J: Response Business Event Error Codes") or extract the message text from response Business Event 210, if TPS 130 included the text.

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Table H: Response Business Event Data

Field	Data Tag	Data Format	Max. Length	Optional
EFT Number	1442	0	15	Y*
Settlement Date	1441	0	6	Y
Error Return	EMSG	0	74	Y*

Note: *If Error Return is zero then there will be an EFT Number.

EFT Number is a fifteen character alphanumeric string sent from TPS 130 if the payment has been accepted. This string is the only verification that the transaction was processed.

Settlement Date is the date used for the tax payment if the requested settlement date was not accepted. The settlement date is returned with an EFT number.

Error Return is used if Business Event 210 has a non-zero return code. The error return field data stream in the data information block of response BE Data 214 contains three sub-fields, as described in the following table. These sub-fields are contained within the data stream field of the Error Return's data information block (*i.e.*, the sub-fields are not in separate data information blocks). The fields are concatenated together in a single block in the order shown.

Table I: Error Return Sub-Fields

Sub-Field	Length	Optional	Description
Field Tag	4	N	The field that the error is associated with
Error Code	8	N	See "Table J: Response Business Event Error Codes"
Error Text	62	Y	The text of the error

Table J: Response Business Event Error Codes

Error Code	Error Description		
20000001	You are not enrolled to make an ACH Debit Payment.		
20000002	Your payment cannot be accepted at this time. Call Customer Service.		
20000003	That Tax Type cannot be reported at this time.		
20000004	The Tax Payment Reason Code is not valid.		

20000005	Voy are not annulled for this Tour D	
20000003	You are not enrolled for this Tax Type. Do you	
20000007	still want to report it?	
20000007	The date is invalid for this Tax Type. Please	
20000009	specify another date.	
20000009	Dollar Amount is not in the valid range (.01 to 99999999.99)	
20000010		
20000010	The Tax Payment Amount is over the defined threshold. Do you want to override it?	
20000011	The Verification Code is incorrect for this Tax	
20000011	Payment Amount.	
20000012		
20000012	The Settlement Date must be later than today & less than max.	
20000013		
20000013	That date is either invalid or a holiday/weekend. Do not use.	
20000014		
20000014	The Tax Settlement Date must be within 30 days.	
20000013	The Tax Settlement Date must be within 105 days.	
20000016	Your settlement date is after the cutoff time for a	
20000017	1 day Payment Settlement Date.	
	Intended Payment Settlement Date is not numeric.	
20000018	Intended Payment Settlement Date is in error.	
20000019	You reported over \$500,000 for Tax Type 940. Is	
2000000	this correct?	
20000020	You reported over \$100,000 for Tax Type 940. Is	
20000001	this correct?	
20000021	1 tall of is mitalia (of sate category	
20000000	found).	
20000022	The subtotals do not equal the total Tax Payment	
2000000	Amount.	
20000023	You are not eligible to report this Tax Type.	
20000024	This exact payment was previously reported.	
	Proceed anyway?	
20000026	Invalid Filing Period Date. Must be in MMYY	
	format.	
20000027	Taxpayer not currently actively enrolled. No	
	Payment Possible.	
20000028	Taxpayer not valid for the Taxpayer Enrollment.	
20000029	You are not enrolled for this Tax Type. Report it	
	anyway?	
20000048	That date is invalid for this Tax Type. It must be	
	December.	
20000067	Severe error encountered in Date routine	
	FTXP12S.	
20000068	This is not a valid Tax Type. Please specify	
	another Tax Type.	

20000069	You are not enrolled at this Tax Payment Number. Please call 1/800 (English: 272-9872, Spanish: 945-9200).
20000070	The 4-digit PIN is invalid for this tax ID number.
20000071	We cannot find this Tax Identification Number and PIN combination.
20000113	Unable to assign file I.D. for scheduling.

The above tables are provided to illustrate the format and content of data structures that embodiments of EFTPS-PC 122 might use to submit tax data to TPS 130 for processing. As those skilled in the art are well aware, EFTPS-PC 122 could accommodate other data submission requirements that TPS 130 might have.

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COMMUNICATIONS PROCESS OVERVIEW

In order to send tax data to TPS 130, EFTPS-PC 122 initiates a communications process with TPS 130. FIG. 4 shows a flow diagram of an example of a communications interaction between the systems in which two sets of RMBs 310 are exchanged. Referring to FIG. 4, at step 402 TPS 130 is listening for incoming TCP/IP messages. At step 404 EFTPS-PC 122 uses a modem to dial TPS 130, at step 406 the modem connects, and at step 408 EFTPS-PC 122 follows any login procedure that TPS 130 requires. At step 410, EFTPS-PC 122 makes a TCP/IP connection to the IP address for TPS 130, and TPS 130 accepts the connection at step 412.

At step 414, using TCP/IP, EFTPS-PC 122 sends a Transaction Initiation Message (TIM) to TPS 130, which TPS 130 receives at step 416. EFTPS-PC 122 transmits the TIM once prior to sending the first RMB 310. The TIM is a fifty byte ASCII string, the contents of which are provided to software vendors when they register with a Treasury Financial Agent to develop EFTPS-PC 122 software. TPS 130 does not send a response to the TIM, so EFTPS-PC 122 can start sending RMBs 310 if TCP/IP indicates that the TIM transmission was successful. Note that TPS 130 may transmit broadcast messages to EFTPS-PC 122 at the time the connection is initially made, and therefore, EFTPS-PC 122 receives and displays any broadcast messages from TPS 130 before sending the first RMB 310.

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At this point, EFTPS-PC 122 and TPS 130 exchange information sequentially. Execution continues at step 418 when EFTPS-PC 122 sends a first RMB 310 (including send Business Events 210 containing tax data), which is received by TPS 130 at step 420. TPS 130 processes the tax data, and at step 422 TPS 130 sends a first response RMB 310, which EFTPS-PC 122 receives at step 424. This sequential exchange repeats for the second RMB 310, as illustrated in steps 426-432. After receiving the final response RMB 310, EFTPS-PC 122 hangs up the modem at step 434.

FIG. 4 illustrates the exchange of two sets of RMBs 310; however, those skilled in the art will understand that additional sets could be exchanged by repeating steps 426-432. Further, those skilled in the art will understand that embodiments of EFTPS-PC 122 could use any communications process accepted by TPS 130.

3. IMPLEMENTING EFTPS-PC

EFTPS-PC 122 is installed on a standard personal computer (PC) configured as follows:

- Hardware: Intel compatible PC with a minimum 386SX processor (486 processor or higher recommended).
- Memory: Minimum of 4 MB RAM (8 MB of RAM recommended).
- Hard Disk Drive: Minimum of 7MB of available disk space.
- Operating System: Microsoft Windows 3.1 or higher.
 - Modem: Hayes-compatible modem capable of running at a minimum 9600 baud rate (faster baud rate is recommended).

The key functionality of EFTPS-PC 122 is implemented with Microsoft Access, a relational database system; a portion of the communications module is implemented in the C programming language. Those skilled in the art will understand that alternative embodiments of EFTPS-PC 122 could be implemented using other data input and storage systems (*e.g.*, spreadsheet programs), using other relational database systems (*e.g.*, Oracle or Informix), or using other programming languages (*e.g.*, C++ or Visual Basic). Other embodiments of EFTPS-PC 122 could run under other operating systems (*e.g.* Unix or Macintosh) and could be installed on any appropriate hardware.

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EFTPS-PC 122 supports automated software installation. For example, a user installing the software in a Windows 3.1 environment simply has to insert the correct program disk in the drive, select File and Run from the Program Manager, and follow the directions displayed on the screen. The installation process loads files from the program disks on to the hard drive of client PC 120.

4. OPERATING EFTPS-PC

The following sections describe an embodiment of EFTPS-PC 122 implemented with design and functional features that are common in Microsoft Windows applications. These features include: accepting user input from a mouse or keyboard; starting EFTPS-PC 122 when the user double-clicks on an application icon; obtaining user input from dialog box fields; providing Control Menu items that allow the user to close or restore a window; and executing EFTPS-PC 122 options when the user selects an option button. These and other standard Microsoft Windows features are well known to those skilled in the art and need not be described in detail here. See for example, any Microsoft Windows User's Guide. The following detailed description of EFTPS-PC 122, therefore, discusses only those features that are specific to EFTPS-PC 122 functionality and operation. For example, it is understood that the user knows how to use a Browse button to locate a file and knows how to use the items on a File Menu to setup a printer.

As previously noted, the key functionality of EFTPS-PC 122 is implemented with Microsoft Access. This means that EFTPS-PC 122 stores information (e.g., data input by a user and lists of tax types or error codes) in tables, which are stored in one or more Access databases. EFTPS-PC 122 processes this information using standard Access features and capabilities (e.g., queries, forms, reports, macros, and modules).

Because such features and capabilities are well known to those skilled in the art, only those that are unique to EFTPS-PC 122 are discussed herein. For example, it is understood that a user could select a particular data record from a set of displayed records by clicking on a record pointer button or, alternatively, a user could scroll through a set of records using a record selector bar. It is also understood that a user can navigate between screens by selecting an appropriately labeled button (e.g., a

Back button) to return to the previous screen. For additional information, see the Microsoft Access User's Guide or the Access online help function.

As an overview of how a user operates EFTPS-PC 122, FIG. 5 shows a flow diagram of the major functions of one embodiment of EFTPS-PC 122. The flow diagram does not indicate a next action at the end of the function branches because, as those skilled in the art understand, Microsoft Windows applications are generally event driven. In other words, a user performs EFTPS-PC 122 functions in any reasonable order, and after a function terminates it is up to the user to initiate the next action.

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4.1. EFTPS-PC Program Group

EFTPS-PC 122 functionality is divided into two components. One component, "Make Payments" includes functionality for making payments and performing administrative tasks. The other component, "Repair and Compress" is used for repairing and maintaining EFTPS-PC 122 databases. When a user opens the EFTPS-PC 122 Program Group, icons corresponding to the two components are displayed. As those skilled in the art will appreciate, EFTPS-PC 122 functionality could be divided into additional components or combined in one component. The following sections describe EFTPS-PC 122 functionality in detail.

4.2. Make Payments Icon

When the user selects a Make Payments icon from an EFTPS-PC 122 Program Group, EFTPS-PC 122 presents a Main Menu as a window including a set of buttons. Each button corresponds to, and allows the user to invoke, one of the EFTPS-PC 122 major functions: Enter, View, Edit, Send, Administration, and Exit. The View, Edit, and Administration functions are, in turn, further divided into sub-functions. Thus, when the user selects View, Edit, or Administration, EFTPS-PC 122 presents a Sub-Menu window that includes buttons for the appropriate sub-functions. EFTPS-PC 122 also uses a menu bar at the top of many windows to provide standard windows menu items including: File, Search, and Help. Some menu bars also include a User item, which is specific to EFTPS-PC 122. This item allows the user to invoke a View Special Fields function for entering and viewing optional user fields, discussed in the section entitled "Enter Function." Other techniques, well known to

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those skilled in the art, can be used to allow the user to select an EFTPS-PC 122 function. For example, other embodiments of EFTPS-PC 122 could allow a user to select a function from a drop-down menu list or from a dialog box radio button.

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Referring to FIG. 5, execution starts at step 505 when EFTPS-PC 122 obtains the user's name and password, which together form the user's logon. EFTPS-PC 122 verifies that the logon is valid. If the logon is invalid, EFTPS-PC 122 displays an error message and allows the user to try again or cancel the logon procedure. Once a valid logon is obtained, EFTPS-PC 122 displays the EFTPS-PC 122 Main Menu. Those skilled in the art understand that other embodiments of EFTPS-PC 122 could use other logon procedures, or might not require a logon procedure at all.

Execution continues at step 510 when the user selects one of the Main Menu major functions: Enter, View, Edit, Send, Administration, or Exit. Each of these functions is described in detail in the following sections.

4.2.1. Enter Function

The Enter function is used to enter and validate tax data. EFTPS-PC 122 collects tax data as ASCII input and stores it in an Access database table (e.g., a payments table). Each row in such a table (i.e., each record) includes columns of tax data entries (i.e., tax data fields). EFTPS-PC 122 uses other Access database tables for internal functions such as temporary storage and data validation. All of these tables, which are referred to herein collectively as the "EFTPS-PC 122 database," are described in detail in "Appendix B: Database Tables." As those skilled in the art understand, other embodiments of EFTPS-PC 122 could use alternative database table designs.

If the user selects Enter at step 510 of FIG. 5, EFTPS-PC 122 displays a data entry screen, such as Enter Payments screen 600, illustrated in FIG. 6, to accept data entered by the user. If EFTPS-PC 122 requires that the user enter data for a particular tax data field (*i.e.*, a required data field), a corresponding data entry field is displayed. For example, if Taxpayer Identification Number (TIN), Personal Identification Number (PIN), Tax Form, Reason Code, Tax Period, Amount, Verification Code, and Requested Settlement Date are required tax data fields, data entry fields 602, 604, 606, 608, 610, 612, 614, and 616 appear on Enter Payments screen 600.

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EFTPS-PC 122 also accepts tax data for payment detail fields that are unique to specific tax forms, such as FICA Equivalent Amount, Industry Amount, and Supplemental Amount for a CT-1 tax form. EFTPS-PC 122 displays an additional dialog box, such as Payment Detail 618, on Enter Payments screen 600 to accept payment detail tax data.

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In addition to tax data that EFTPS-PC 122 accepts for submission to TPS 130, EFTPS-PC 122 allows the user to display, and enter data for, two optional user fields, such as User Field 1 620 and User Field 2 622. The data in these optional fields is used solely by the user (*i.e.*, the data is not used by EFTPS-PC 122 or sent to TPS 130). For example, if an accounting firm uses EFTPS-PC 122 to collect and submit tax payment data for its clients, data used for sorting the tax data records can be entered in these user fields. To add user fields, the user selects the View Special Fields item from the User item on the Enter function window's menu bar. Data for the user fields can be entered in all records or in only a few.

Other embodiments of EFTPS-PC 122 could provide for additional user fields or other extended capabilities (*i.e.*, capabilities beyond those required for collecting and submitting tax data to TPS 130). In addition, embodiments of EFTPS-PC 122 could accept and send other tax data, such as data needed to enroll a taxpayer in EFTPS, if such data is accepted by TPS 130.

The user can enter data by typing it into a data entry field. Alternatively, for some fields, EFTPS-PC 122 presents the user with an associated set of choices from which the user can select one entry. For example, EFTPS-PC 122 presents choices for the Tax Form and Reason Code fields on drop-down selection lists. The user can enter amounts with or without a dollar sign or decimal point. If necessary,

EFTPS-PC 122 adds a dollar sign and decimal point (after multiplying the amount by 100) to an amount data field display when the input focus moves to another data entry field.

EFTPS-PC 122 validates that the data entries satisfy validity criteria. For example, EFTPS-PC 122 verifies that each required data field contains an entry. EFTPS-PC 122 also validates data entries according to rules, such as those in the following table. If a required data field is empty, or if any data field contains invalid

data, EFTPS-PC 122 displays an error message on the screen. Those skilled in the art know that EFTPS-PC 122 can validate data entries according to any appropriate rules, in any appropriate order (*e.g.*, as each entry is made or after several entries are made). In some cases, the validity of one entry is dependent upon another entry (*e.g.*, the validity of a Reason Code entry or a Tax Period entry depends on the corresponding Tax Form entry).

Table K: Data Field Validation Rules

Field	Required	Field Rules
TIN	Yes	Must be 9 digits.
PIN	Yes	Must be 4 digits.
		Must enter TIN first.
Tax Form/Reason	Yes	Tax Form, Reason Code, and the
Code		combination must be valid per
		"Appendix A: Tax Form Reference
		Information."
Tax Period	Yes	Must be YYMM.
		Must enter Tax Form first.
		Cannot retransmit record if
		acknowledgment field is not null
		(i.e., there is an EFT number in the
		record).
		Month must be valid per applicable
		Tax Code Conversion table in
		"Appendix A: Tax Form Reference
		Information."
Payment Amount	Yes	Total amount must be > 0 and <=
		99,999,999.99.
Sub-category	No	Sub-category amounts must be >=0
Amount		and <= 99,999,999.99.
		Sub-category amounts are not
	}	required, but if they are used, the
		sub-category code is required and
		cannot be duplicated in the
		payment detail list.
		The total of the sub-category
		amounts must equal the Payment
*7 .0	 	Amount.
Verification Code	Yes	Two digits.
		See explanation following this
G. (1)		table.
Settlement Date	Yes	MMDDYY
Tax Type Override	No	"Y" or "N" entry.

Threshold Override	No	"Y" or "N" entry.
Duplicate Override	No	"Y" or "N" entry.
FUTA Override	No	"Y" or "N" entry.
Filing Period	No	"Y" or "N" entry.
Override		·

EFTPS-PC 122 uses the Verification Code to ensure that the user enters a payment amount correctly. The Verification Code is calculated based on the payment amount. For a payment amount of \$3,650.31 the calculation is as follows: (1) add the digits in the payment amount (3+6+5+0+3+1=18), (2) count the number of digits in the payment amount, including two decimal places (3, 6, 5, 0, 3, 1=6), and (3) calculate the sum of the two numbers (18+6=24). Thus, the Verification Code entry for \$3,650.31 is 24. Because the Verification Code is a two digit number, if necessary, a leading zero is added (e.g., the code for a sum of 9 is 09) or the first digit is dropped (e.g., the code for the sum of 136 is 36). As those skilled in the art understand, EFTPS-PC 122 can use any appropriate method to verify a payment amount entry.

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EFTPS-PC 122 provides several buttons on Enter Payments screen 600 to allow the user to specify how the tax data record should be handled. Referring to FIG. 6, if an "X" appears in Ready To Send indicator box 624, EFTPS-PC 122 submits the tax data record in the next transmission to TPS 130. The user can turn off the "X," and hold the payment, by clicking on Ready To Send indicator box 624. To save the current tax data record the user selects a Save This Payment Record button, and to delete the current tax data record the user selects a Delete button.

As discussed above in the section entitled "Remote Message Block," TPS 130 may impose a limit of 100 Business Events 210 in a each RMB 310. Therefore, because each Business Event 210 contains the data from one tax data record, EFTPS-PC 122 limits the number of tax data records in the EFTPS-PC 122 database at any one time to 100 records, including any combination of new, held, and previously transmitted records. When the 100 record limit is reached, EFTPS-PC 122 does not allow the user to enter more records. To free up space within the 100 record limit the user could, for example, send records that are ready for transmission and then

delete those records that are accepted by TPS 130. Alternatively, the user could export completed records to an archival file as discussed in the section entitled "Administration Function" and delete them from the EFTPS-PC 122 database.

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listed for security reasons.

Those skilled in the art realize that other methods could be used to implement a limit on the number of records per transmission, if such a limit is necessary. For example, another embodiment of EFTPS-PC 122 could allow the user to store any reasonable number of records in the EFTPS-PC 122 database and simply limit the number of records that the user selects for transmission, as necessary.

4.2.2. View Function

The View function is used to view previously entered payments. If the user selects View at step 510 of FIG. 5, execution continues at step 520 where EFTPS-PC 122 presents the user with five buttons, one for each view option:

(1) Summary View, (2) All Payments, (3) Sent Payments, (4) Unsent Payments, and (5) Rejected Payments. EFTPS-PC 122 invokes standard Access functions to display a summary report of the tax data records in summary form (for the Summary View option) and to allow the user to view individual records sequentially (for the detail view options).

Summary View. If the user selects the Summary View button, EFTPS-PC 122 displays information about the status of the records in the EFTPS-PC 122 database. EFTPS-PC 122 displays a screen such as Summary View screen 700, illustrated in FIG. 7. Each record is displayed on one line, and an arrowhead in the leftmost column points to the active record. The columns on Summary View screen 700 contain the data values for the following data fields:

Column 702: Payment ID is the last four digits of an eleven digit number that EFTPS-PC 122 assigns sequentially to tax data records. EFTPS-PC 122 uses these last four digits as the sequence number in BE Header 212 of Business Event 210 that contains the tax data for the record. This eleven digit sequence number is reset to "1" after the database is compressed. The section entitled "Repair and Compress Icon" discusses the Access Compress command.

Column 704: TIN is the Taxpayer Identification Number. The PIN is not

Column 706: Tax Form is the type of tax payment.

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Column 708: Tax Period is the period for the transaction.

Column 710: Amount is the amount of money to be paid.

Column 712: Request Settle Date is the date requested for settlement of the transaction.

Column 714: Actual Settle Date is the date the transaction was actually settled. This date only appears if it is different from the requested settlement date.

Column 716: Ready is the transmission status. An "X" indicates that the record is ready for transmission.

Column 718: Sent is the number of times the record has been sent. A "0" indicates that the record has never been transmitted.

Column 720: EFT Number is a 15-digit number indicating that the record has been successfully transmitted to TPS 130. If no number appears, the record needs to be sent or edited and sent again. The user should make a note of this number because it is the only acknowledgment TPS 130 provides for a successful transaction.

Column 722: Error is an indicator that a message is associated with the record. An "X" in this column indicates that there is a message that the user can view with the Edit function, which is described in the section entitled "Edit Function."

Column 724: NOEFT is an indicator that there is no EFT number for this record. An "X" in this column indicates that EFTPS-PC 122 sent the record to TPS 130, but that no acknowledgment was received.

All Payments, Sent Payments, Unsent Payments, and Rejected Payments. To sequentially view complete details of tax data records, the user can select one of the detail View function option buttons: All Payments (for all entered records), Sent Payments (for only the records sent to TPS 130), Unsent Payments (for only the records not sent to TPS 130), and Rejected Payments (for only records rejected by TPS 130). EFTPS-PC 122 invokes standard Access functions to retrieve and display the records for a particular View function option.

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In addition to the fields for which the user entered data with the Enter function, the following fields are also displayed: Actual Settlement Date, EFT Number, Last Modified By (indicating a user name), and override indicators (described in the section entitled "Edit Function"). For rejected payments, the reason for the rejection is displayed as a message at the bottom of the display. If multiple messages exist, the user can scroll through them.

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4.2.3. Edit Function

The Edit function is used to edit a record before it is sent to, or after it is rejected by, TPS 130. If the user selects Edit at step 510 of FIG. 5, execution continues at step 525 where EFTPS-PC 122 presents the user with two buttons, one for each Edit function option: (1) Unsent Payments and (2) Rejected Payments. EFTPS-PC 122 invokes standard Access functions to display the appropriate records for the option and to allow the user to navigate through the records in order to edit individual data fields.

Unsent Payments. If the user selects the Unsent Payments button,
EFTPS-PC 122 executes a procedure for editing unsent payments, such as Unsent
Payments procedure 800, illustrated in FIG. 8. Referring to FIG. 8, at step 802,
EFTPS-PC 122 opens a "payments" form to display a screen for editing payments that
is similar to Enter Payments screen 600, illustrated in FIG. 6. At step 804

EFTPS-PC 122 selects the records that are marked in the EFTPS-PC 122 database as
"unsent." Then at step 806, EFTPS-PC 122 sets the editing property so that the user
can only edit data fields or delete records. If the user wants to add new records, the
Enter function is used. EFTPS-PC 122 turns on the Access navigation capabilities at
step 808 and sets the caption of the window to "Edit Unsent Payments" at step 810.

Lastly, at step 812, EFTPS-PC 122 sets to visible (*i.e.*, displays) data fields that are not displayed on Enter Payments screen 600. These fields include Payment ID (which is displayed to the left of TIN data field 602), along with User Field 1 620 and User Field 2 622, described above. In addition, several override indicator boxes are displayed below Ready To Send indicator box 624. The override indictors, which are selected and deselected in the same way as Ready To Send

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indicator box 624, are used to implement an Override function, which allows the user to override certain of the standard limits as follows:

Override Tax Type. When a taxpayer enrolls in the EFTPS program, the taxpayer is pre-qualified to enter data for certain tax types. If a record is rejected because the taxpayer is not qualified for that tax type, the user can select this option and resubmit the record.

Override Threshold. When the amount of the tax payment exceeds the limit (as pre-defined by the taxpayer during enrollment) for a tax form type, the payment may be rejected. The user can select this option to override the amount threshold and then resubmit the record.

Override Duplicate. TPS 130 automatically rejects duplicate records. If EFTPS-PC 122 sent a record but did not receive a response, it is possible that TPS 130 received the information, but was unable to transmit a response due to a communications problems. If the user resubmits the payment and a duplicate record error is returned, the user can select this option to resubmit the record.

Override FUTA. The user can select this option to override FUTA standard limits.

Override Filing Period. The user can select this option to override the filing periods for a particular tax form.

Rejected Payments. If the user selects the Rejected Payments button from the Edit function, EFTPS-PC 122 executes a procedure analogous Unsent Payments procedure 800. EFTPS-PC 122 simply substitutes a "No Acknowledgment Query" for the "Unsent Query" at step 804. Note that in order to resubmit a record containing previously rejected payment data, the user needs to enter the PIN again. If the PIN is not present when the user tries to resubmit the record, a dialog box appears listing those records missing PINs. If this occurs, the user returns to the Edit function and enters PINs for the identified records.

4.2.4. Send Function

The Send function is used to submit tax data to TPS 130 for processing. If the user selects Send at step 510 of FIG. 5, execution continues at step 530 where

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EFTPS-PC 122 displays a screen, such as Summary View screen 700, so that the user can review and/or edit the data before it is sent to TPS 130. To edit a record, the user selects the record's row and then selects an Edit button. EFTPS-PC 122 displays an Edit Payments screen and allows the user to edit the selected record, as described in the section entitled "Edit Function," provided that the user has editing access. When the user is done with any editing, the user selects a Back button to return to Summary View screen 700.

At any point prior to sending the tax data, if the user wants to hold back any records from being sent to TPS 130, the user can remove the "X" in Ready column 716 for those records. When the user is ready to send the selected tax data records, the user selects a Send button. As a precaution, EFTPS-PC 122 verifies that the user wants to transmit the data. If the user selects an OK button, EFTPS-PC 122 executes a procedure for sending tax data to TPS 130, such as Send procedure 900, illustrated in FIGS. 9A and 9B.

Referring to FIG. 9, EFTPS-PC 122 initializes the communications session at step 905. Assuming that a connection is made, at step 910 EFTPS-PC 122 sends a Transaction Initiation Message (TIM), as described previously in the section entitled "Communications Process Overview." At step 915 EFTPS-PC 122 verifies that the TIM was sent successfully, and if it was not, EFTPS-PC 122 generates an error message at step 920, before exiting the procedure. If the TIM was sent successfully, execution continues at step 925 where EFTPS-PC 122 constructs Transmission Header 312 for RMB 310, as described above in the section entitled "Remote Message Block."

EFTPS-PC 122 starts a loop through the tax data records being sent to
TPS 130. For each tax data record, EFTPS-PC 122 constructs one Business
Event 210, which EFTPS-PC 122 stores in RMB 310 until RMB 310 is ready to send.
Specifically, before constructing the next Business Event 210, at step 930
EFTPS-PC 122 checks to see if RMB 310 is ready to send by testing if (1) the next
Business Event 210 will put RMB 310 over the 4k bytes size limit, (2) RMB 310
already includes ten Business Events 210, or (3) there are no more Business
Events 210 to store in RMB 310. If none of these tests is true, EFTPS-PC 122 builds

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the next Business Event 210 and stores it in RMB 310, at step 935. EFTPS-PC 122 continues with the loop at step 930. These tests express the rules for building RMB 310 discussed in the section entitled "Remote Message Block." As noted in that section, these rules reflect TPS 130 specifications and, therefore, other embodiments of Send procedure 900 could use other tests at step 930.

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When one of the tests at step 930 is true, EFTPS-PC 122 sends RMB 310 to TPS 130 at step 940. At step 945 EFTPS-PC 122 verifies that RMB 310 was sent successfully, and if it was not, EFTPS-PC 122 generates an error message at step 950, before exiting the procedure. If RMB 310 was sent successfully, execution continues at step 955 where EFTPS-PC 122 receives a response RMB 310 from TPS 130, using a blocking read with a time out.

If EFTPS-PC 122 does not receive a response RMB 310 before a time out, at step 965 EFTPS-PC 122 generates an error message, before exiting the procedure. If EFTPS-PC 122 does receive a response RMB 310, at step 960 EFTPS-PC 122 processes the response Business Events 210. EFTPS-PC 122 then checks if there are any more Business Events 210 to send to TPS 130. If there are no more (*i.e.*, all the tax data records have been processed), execution ends. Otherwise, execution continues with the loop at step 930.

During the communications session, EFTPS-PC 122 disables its other features and displays a screen with the status of the data being sent and received. When all of the tax data records have been sent to TPS 130 and the responses received, the status screen is removed and the user can continue to use EFTPS-PC 122 or exit the application.

Premature breaks in a communications session, however, are inevitable. For instance, transmission can be interrupted by the user prematurely turning off Client PC 120 or by problems with VAN 125. If transmission is interrupted after TPS 130 receives RMB 310 from EFTPS-PC 122, but before TPS 130 sends a response, the user may not know which tax data records have been accepted. If RMB 310 is resubmitted and it contains tax data records that TPS 130 has already received, the user will need to use the Override Duplicate indicator discussed in the section entitled "Edit Function."

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4.2.5. Administration Function

The Administration function is used to perform several EFTPS-PC 122 administrative tasks. If the user selects Administration at step 510 of FIG. 5, execution continues at step 535 where EFTPS-PC 122 presents the user with six buttons, one for each Administration option: (1) Print Summary Report, (2) Import/Export, (3) Security, (4) Setup, (5) Delete Acknowledged Payments, and (6) Delete All Payments.

Print Summary Report. This option prints a copy of the record summary report displayed with the Summary View button, described in the section entitled "View Function."

Import/Export. This option imports records in a batch mode or exports records to an archival file. All data is imported and exported as an ASCII string in either a comma-delimited or fixed-field format. This means that each record is stored as a single line of characters in which the fields are separated by commas or have a defined length. Examples of import and export data file formats are included in "Appendix C: Import/Export Data Files." The user can create an import data file with any appropriate tool (e.g., a word processor or a spreadsheet program) that can format the data as required by EFTPS-PC 122.

When the user selects the Import/Export button, EFTPS-PC 122 presents the user with eight buttons, one for each Import/Export option: (1) Export All Records To Fixed Field Width File, (2) Export Sent Records to Fixed Field Width File, (3) Export Acknowledged Records to Fixed Field Width File, (4) Export All Records to Comma Delimited File, (5) Export Sent Records to Comma Delimited File, (6) Export Acknowledged Records to Comma Delimited File, (7) Import From Fixed Field Width File, and (8) Import From Comma Delimited Field File.

When the user selects any of the Import/Export options, EFTPS-PC 122 displays a dialog box and suggests the name of the file to be imported or exported. For example, if the user selects one of the Fixed Field Width options the suggested file name could be *eftfix01.txt*, and if the user selects one of the Comma Delimited Field options the suggested file name could be *eftdlm01.txt*. The user can accept the suggested name, type in a new name, or use a Browse button to locate another file.

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If the user selects one of the import options, EFTPS-PC 122 executes a procedure for importing a tax data file, such as File Import procedure 1000, illustrated in FIG. 10. Referring to FIG. 10, at step 1002 EFTPS-PC 122 determines the type of import file (*i.e.*, fixed field or comma delimited). If the file is fixed field, EFTPS-PC 122 imports the data at step 1004, and if the file is comma delimited, EFTPS-PC 122 imports the data at step 1006. In either case, the data is imported into a temporary table.

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At step 1008, EFTPS-PC 122 verifies if there are any import errors according to rules such as those in "Table K: Data Field Validation Rules." If there were errors, at step 1010 EFTPS-PC 122 verifies that the temporary table contained at least one record, before deleting the temporary table records at step 1012. At step 1014, EFTPS-PC 122 notifies the user that the import process is being canceled. At step 1016 EFTPS-PC 122 displays the import errors to the user, before exiting the procedure.

If EFTPS-PC 122 found no errors at step 1008, execution continues at step 1018 where EFTPS-PC 122 gets a count of the total number of records already in the EFTPS-PC 122 database plus those in the import file. Because EFTPS-PC 122 limits the number of tax data records in the EFTPS-PC 122 database at any one time to 100 records, no more than 100 records can be imported at a time. At step 1020 EFTPS-PC 122 checks if the total number of records is greater than 100. If there are too many records, at step 1022 EFTPS-PC 122 notifies the user that the import process is being canceled. At step 1024 EFTPS-PC 122 deletes the records in the temporary table, before exiting the procedure. Other embodiments of EFTPS-PC 122 could control the number of records in the database using different procedures. For example, another embodiment of EFTPS-PC 122 could verify that the database was empty before importing a file, and then check that the number of records in the file did not exceed 100. Yet another embodiment might not limit the number of records being imported, and simply read the import file if no errors were detected.

If the number of records did not exceed 100 at step 1020, execution continues at step 1026 where EFTPS-PC 122 uses the import file as the import query. At step 1028 EFTPS-PC 122 updates the recordset, and at step 1030 EFTPS-PC 122

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notifies the user that the import succeeded. To finish the import process, execution continues at step 1024 where EFTPS-PC 122 deletes the records in the temporary table, before exiting the procedure.

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If the user selects one of the export options, EFTPS-PC 122 executes a procedure for exporting a tax data file, such as File Export procedure 1100, illustrated in FIG. 11. Referring to FIG. 11, at step 1102 EFTPS-PC 122 opens a recordset with a query matching the export option the user selected (*e.g.*, all records, sent records, or acknowledged records). At step 1104 EFTPS-PC 122 verifies that the recordset contains at least one record. If there are no records, at step 1106 EFTPS-PC 122 notifies the user that the export process is being canceled, before exiting the procedure.

If at step 1104 EFTPS-PC 122 finds that the recordset contains at least one record, EFTPS-PC 122 gets a count of the number of records to export at step 1108. At step 1110, EFTPS-PC 122 asks if the user wants a printed summary report of the records, and if the user requests the report, EFTPS-PC 122 generates and prints the report at step 1112. In either case, at step 1114 EFTPS-PC 122 executes a file export routine that corresponds to the file export option selected by the user (*e.g.*, either fixed field or comma delimited field format for either all records, sent records, or acknowledged records).

At step 1116 EFTPS-PC 122 asks if the user wants to delete the exported records from the EFTPS-PC 122 database, and at step 1118 EFTPS-PC 122 checks the user's response. If the user wants to delete the records, EFTPS-PC 122 does so at step 1120. In either case, execution continues at step 1122 where EFTPS-PC 122 updates the recordset. To finish the export process, at step 1124 EFTPS-PC 122 notifies the user that the export succeeded, before exiting the procedure.

Security. This option serves the dual purpose of permitting the system administrator to authorize user access and allowing individual users to change passwords. When a user starts EFTPS-PC 122, a Logon dialog screen is displayed, requesting a name and a password. The name is the user's logon (not case sensitive) which is secured by the user's password (case sensitive). EFTPS-PC 122 starts with three default logons and three corresponding passwords:

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Logon
Administrator
Manager
Data

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Password administrator manager data PCT/US98/16741

A user logging on as "Data" is a member of the Data Entry Group and has permission to add new payments, view existing payments, and import or export payment records. A Data user does not have permission to set up the modem, send payments, edit or change existing data, or add or administer user logons.

As user logging on as "Manager" is a member of the Managers Group and has permission to do everything a Data user can do, plus edit or change existing data and transmit payment data. A Manager user does not have permission to set up the modem or to add or administer user logons.

A user logging on as "Administrator" is a member of the Administrators Group and has permission to do everything a Manager user can do, plus set up the modem and add or administer user logons.

Setup. This option provides the means for configuring the communications data needed prior to any communications with TPS 130. If the user selects the Setup option, EFTPS-PC 122 displays a Modem Setup dialog box. The dialog box includes data fields for entering communications parameters (*e.g.*, communications port and baud rate), host parameters (*e.g.*, IP address, port number, and site ID), modem type, and dial preferences (*e.g.*, logon profile, host telephone number, user name, and password). In one embodiment of EFTPS-PC 122, the logon profile is simply a synonym for the host telephone number, and the password field, which controls access to TPS 130, is always blank.

If the user selects a Save button on the dialog box after entering communications configuration data values, EFTPS-PC 122 gets the data values from those fields. To ensure that it gets accurate and complete communications data, EFTPS-PC 122 can take additional steps. First, some data values, such as the IP address and the port number, are pre-configured to eliminate user input errors. Second, if any required field (e.g., the primary telephone number) is blank, the user

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cannot save the configuration. Third, before accepting new data values, an extra dialog box is displayed to verify that the user wants to overwrite a previous setup.

Delete Acknowledged Payments. This option deletes all tax data records that have been sent and successfully acknowledged with an EFT number. Before selecting this option, the user may want to export the records to a file to save the EFT numbers because this is the only proof of the transaction provided by TPS 130. Before deleting the records from the EFTPS-PC 122 database, EFTPS-PC 122 verifies that the user has the appropriate user access, as described above in the Security option. As a precaution, EFTPS-PC 122 also displays a message box asking if the user is sure about deleting the acknowledged payments and only proceeds if the user selects a Yes button. Lastly, before deleting the payments, EFTPS-PC 122 asks if the user wants a printed summary report of the payments to be deleted.

Delete All Payments. This option deletes all tax data records in the EFTPS-PC 122 database, and is otherwise similar to the Delete Acknowledged Payments option.

4.2.6.

The Exit function is used to terminate EFTPS-PC 122.

4.2.7. Help Menu

Online help is a standard Windows function that the user can access in a variety of ways. EFTPS-PC 122 provides access to online help by including a Help item on window menu bars. Alternatively EFTPS-PC 122 provides access if the user presses the F1 function key.

4.3. Repair and Compress Icon

As with any database system, there are times when a database indexing system

can become corrupted. For example, at the moment a record is being saved, the
power to the building may fail. The next time the EFTPS-PC 122 database is
accessed, the user receives an error message stating that the database is possibly
corrupted and the user should elect the option to repair it. This is the purpose of the
Repair and Compress icon in the EFTPS-PC Program Group. When the user selects
the Repair and Compress icon, EFTPS-PC 122 automatically runs the standard Access
Repair and Compress commands. EFTPS-PC 122 displays a message such as

"Repairing and Compressing the EFTPS-PC Database... Please wait" while the commands are executing. If the process completes successfully, EFTPS-PC 122 displays a message such as "The EFTPS-PC Database was Repaired and Compressed successfully." If errors are detected, EFTPS-PC 122 displays advisory messages. EFTPS-PC 122 uses an eleven digit sequence number for tax data records. After the database is compressed, this number is reset to "1."

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As a precaution, EFTPS-PC 122 always runs Repair before Compress even if no error message indicates that the EFTPS-PC 122 database is corrupted. Those skilled in the art understand that EFTPS-PC 122 could provide access to the Repair and Compress commands individually and let the user invoke them separately. It is recommended that the EFTPS-PC 122 Repair and Compress component is run periodically (*e.g.*, once a month) as a preventive maintenance measure. If errors are detected, some records may have been lost. It is even possible that the entire set of records cannot be recovered. At this point, the only recourse the user has is to restore the EFTPS-PC 122 database from the last backup copy. Therefore, on a periodic basis, the system administrator should make a backup copy of the EFTPS-PC 122 database files.

5. Other Embodiments

Other embodiments of the invention could use any appropriate user interface
to interact with EFTPS-PC 122 procedures. Such interfaces include, but are by no
means limited to, other graphical user interfaces (GUIs), such as the X11 windows
environment; interactive display of text-based menu lists of options; and command
line interfaces that obtain system input from parameters entered on the command line.
It will be appreciated by those skilled in the art that further embodiments of the
invention may be made without departing from the spirit and scope of the invention as
described herein. Such embodiments are intended to be within the scope of the
appended claims.

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Appendix A: Tax Form Reference Information Special Requirements for Tax Types 941 and CT-1

Two tax types have special sub-category amount fields allowing entry of amounts up to \$99,999,999.99. EFTPS-PC 122 allows the user to input the following data:

Tax Type 941

Social Security Amount

Medicare Amount

Tax Withholding Amount

Tax Type CT-1

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FICA Equivalent Amount

Industry Amount

Supplemental Amount

15 Special Requirements for Tax Types 720 and 720M

Tax types 720 and 720M allow amount information (up to \$99,999,999.99) against specific sub-category codes. EFTPS-PC 122 allows the user to input up to 10 sub-category codes and amounts.

Tax Reason Codes

Code	Reason Description
0	Payment initiating backup withholding or Amended
	Return or: Prompt Assessment Billing Assembly via
	Form 3552
2	Payment due on an extension or with Form 8736 or:
	Application for Extension-Excise, Income & Others via
	Form 2758
4	A deficiency assessed by IRS or an advance payment for
	a CP2000
5	Federal Tax Deposit
6	An estimated payment or a Federal Tax Deposit
7	Payment due with a return, extension, Form 8800 or an
	IRS notice or: Installment Agreement Request - via
	Form 9465

Note: Each tax form has an associated tax reason code. Not all reasons are applicable to every tax form.

The following are the applicable reason codes for specific tax form types:

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Tax Forms 11-C, 730, 706A, 706GS(D), 706GS(T), 926, 990, 990BL, 1041A, 1065, 1066, 1120DISC, 2290, 2438, 3520, 4720, 5227, 5329, 5811, 6069,

IRC7803(c), 8288, 8404, 8612, 8613, 8697, 8725, 8752, 8804: 0, 2, 7

Tax Forms 706, 709, 990C, 990T, 1120, 1041, 990PF: 0, 2, 6, 7

Tax Forms 940, 943: 0, 2, 4, 5, 7

Tax Forms 945, 1042: 0, 2, 5, 7

Tax Form 1040: 0, 2, 4, 6, 7

10 Tax Form 941: 0, 2, 4, 5, 7

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Tax Form CT-1: 0, 2, 5, 7

Tax Form 720: 0, 2, 5, 7

Tax Form 720M: 0, 2, 7

Tax Code Conversion Table for Business Taxpayers

Tax Code Conversion Table for Business Taxpayers		
11-C Special Tax Return &	Tax Code	Valid Months
Application for Registry-Wagering		
Payment due with a tax return, or an IRS	01117	Jan-Dec
notice		
706A US Additional Tax Return	Tax Code	Valid Months
Payment due with a tax return, or an IRS	70617	Jan-Dec
notice		
706GS(D) Generation-Skipping	Tax Code	Valid Months
Transfer Tax for Distribution		
Payment due with a tax return, or an IRS	70627	December
notice		
706GS(T) Generation-Skipping	Tax Code	Valid Months
Transfer Tax for Termination		
Payment due with a tax return, or an IRS	70637	December
notice		
720 Quarterly Excise Tax	Tax Code	Valid Months
Federal Tax Deposit (with optional	72005	March, June,
sub-categories)		
Payment due with a tax return, or an IRS	72007	Sept, Dec
notice		,
720M Monthly Excise Tax	Tax Code	Valid Months
Payment due with a tax return, or an IRS	07207	March, June,
notice (with optional sub-categories		September,
		December
730 Tax on Wagering	Tax Code	Valid Months

Payment due with a tax return, or an IRS	07307	Jan-Dec
notice		
926 Return by Transferor of	Tax Code	Valid Months
Property to Foreign Corporation,		
Estate, Trust, or Partnership		
Payment due with a tax return, or an IRS	09267	December
notice		
940 Employer's Annual	Tax Code	Valid Months
Unemployment Tax Return		
Federal Tax Deposit	09405	December
Payment due with a tax return, or an IRS	09407	
notice		
A deficiency assessed by IRS	09404	
941 Employer's Quarterly Tax	Tax Code	Valid Months
Return		
Federal Tax Deposit (with optional	94105	March, June
sub-categories)		
Payment due with a tax return, or an IRS	94107	Sept, December
notice		
A deficiency assessed by IRS	94104	
943 Employer's Annual Tax for	Tax Code	Valid Months
Agricultural Employees		
Federal Tax Deposit	09435	December
Payment due with a tax return, or an IRS	09437	
notice		
A deficiency assessed by IRS	09434	
945 Withheld Federal Income Tax	Tax Code	Valid Months
Federal Tax Deposit	09455	December
Payment due with a tax return, or an IRS	09457	
notice		
Payment initiating backup withholding	09450	
990 Organization Exempt Income	Tax Code	Valid Months
Tax		
Payment due with a tax return, or an IRS	09907	Jan-Dec
notice		(FY - month)
990BL Information & Initial Excise	Tax Code	Valid Months
Return for Black Lung Benefit Trust		
Payment due with a tax return, or an IRS	99017	Jan-Dec
notice		(FY - month)
990C Farmers Cooperative Association	Tax Code	Valid Months
Income Tax		
Federal Tax Deposit	99026	Jan-Dec
Payment due with a tax return, or an IRS	99027	(FY - month)
notice		Í
Payment due on an extension	1	1

990PF Return of Private Foundation	Tax Code	Valid Months
Tax		
Federal Tax Deposit	99036	Jan - Dec
Payment due with a tax return, or an IRS	99037	(FY - month)
notice		
990T Exempt Organization Income	Tax Code	Valid Months
Tax		
Federal Tax Deposit	99046	Jan - Dec
Payment due with a tax return, or an IRS	99047	(FY - month)
notice		
Payment due on an extension	99042	
1041 Fiduciary Income Tax Return	Tax Code	Valid Months
Payment due with a tax return, or an IRS	10417	Jan-Dec
notice		
An estimated payment	10416	(FY - month)
Payment on an extension	10412	
1041A US Information Return Trust -	Tax Code	Valid Months
Trust Accumulation of Charitable		
Amounts		
Payment due with a tax return, or an IRS	14117	Jan-Dec
notice		(FY - month)
1042 Annual Withholding Tax for	Tax Code	Valid Months
Income of Foreign Persons		
Federal Tax Deposit	10425	December
Payment due with a tax return, or an IRS	10427	
notice		** ** **
1065 Partnership Return of Income		Valid Months
Payment due with form 8800	10657	Jan-Dec
Payment due with form 8736	10652	(FY - month)
1066 Real Estate Mortgage Investment	Tax Code	Valid Months
Conduit Income Tax	1066	T T
A payment due on an IRS notice	10667	Jan - Dec
1120 Corporation Income Tax	Tax Code	Valid Months
Federal Tax Deposit	11206	Jan-Dec
Payment due with a tax return, or an IRS	11207	(FY - month)
notice	11000	
Payment due on an extension	11202	X I I I I I
1120DISC Domestic International	Tax Code	Valid Months
Sales Corporation Return	11017	I D
A payment due with a tax return, or an IRS	11217	Jan-Dec
notice	T C-1	(FY - month)
2290 Heavy Vehicle Use Tax Return	Tax Code	Valid Months
Payment due with a tax return, or an IRS	22907	Jan-Dec
notice	L	

2438 Regulated Investment Company -	Tax Code	Valid Months
Undistributed Capital Gains		
Payment due with a tax return, or an IRS	24387	December
notice		
3520 Information Return - Creation/	Tax Code	Valid Months
Transfer to Foreign Trusts		
Payment due with a tax return, or an IRS	35207	December
notice		
4720 Certain Excise Tax on Charities	Tax Code	Valid Months
Payment due with a tax return, or an IRS	47207	Jan-Dec
notice		
5227 Split-Interest Trust Information	Tax Code	Valid Months
Return	Tun Couc	vana months
Payment due with a tax return, or an IRS	52277	Jan-Dec
notice	"	(FY - month)
5811 Examination Return Preparer	Tax Code	Valid Months
Case Closing Document		v and ividiting
Payment due with a tax return, or an IRS	58117	Jan-Dec
notice		
6069 Excess Tax on Excise	Tax Code	Valid Months
Contribution to Black Lung Trust		v and ividicing
Payment due with a tax return, or an IRS	60697	December
notice	00057	Become
IRC7803(c) Information Return for	Tax Code	Valid Months
1		VILLE TYLONGER
Tax Exempt Private Activity Bond Issue	ł	1
Payment due with a tax return, or an IRS	80387	Jan-Dec
Payment due with a tax return, or an IRS notice	80387	Jan-Dec
Payment due with a tax return, or an IRS notice		
Payment due with a tax return, or an IRS notice 8288 Withholding Return for		Jan-Dec Valid Months
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US		
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property	Tax Code	Valid Months
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS		
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice	Tax Code 82887	Valid Months Jan-Dec
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related	Tax Code 82887	Valid Months Jan-Dec
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related Deferred Tax Liability	Tax Code 82887 Tax Code	Valid Months Jan-Dec Valid Months
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related	Tax Code 82887	Valid Months Jan-Dec
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related Deferred Tax Liability Payment due with a tax return, or an IRS	Tax Code 82887 Tax Code 84047	Valid Months Jan-Dec Valid Months Jan-Dec
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related Deferred Tax Liability Payment due with a tax return, or an IRS notice 8612 Return of Excise Tax on	Tax Code 82887 Tax Code 84047	Valid Months Jan-Dec Valid Months
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related Deferred Tax Liability Payment due with a tax return, or an IRS notice	Tax Code 82887 Tax Code 84047	Valid Months Jan-Dec Valid Months Jan-Dec
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related Deferred Tax Liability Payment due with a tax return, or an IRS notice 8612 Return of Excise Tax on Undistributed Income of Real Estate Investment Trust	Tax Code 82887 Tax Code 84047	Valid Months Jan-Dec Valid Months Jan-Dec
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related Deferred Tax Liability Payment due with a tax return, or an IRS notice 8612 Return of Excise Tax on Undistributed Income of Real Estate	Tax Code 82887 Tax Code 84047 Tax Code	Valid Months Jan-Dec Valid Months Jan-Dec Valid Months
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related Deferred Tax Liability Payment due with a tax return, or an IRS notice 8612 Return of Excise Tax on Undistributed Income of Real Estate Investment Trust Payment due with a tax return, or an IRS	Tax Code 82887 Tax Code 84047 Tax Code	Valid Months Jan-Dec Valid Months Jan-Dec Valid Months
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related Deferred Tax Liability Payment due with a tax return, or an IRS notice 8612 Return of Excise Tax on Undistributed Income of Real Estate Investment Trust Payment due with a tax return, or an IRS notice 8613 Return of Excise Tax on	Tax Code 82887 Tax Code 84047 Tax Code	Valid Months Jan-Dec Valid Months Jan-Dec Valid Months Jan-Dec
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related Deferred Tax Liability Payment due with a tax return, or an IRS notice 8612 Return of Excise Tax on Undistributed Income of Real Estate Investment Trust Payment due with a tax return, or an IRS notice 8613 Return of Excise Tax on Undistributed Income of Regulated	Tax Code 82887 Tax Code 84047 Tax Code	Valid Months Jan-Dec Valid Months Jan-Dec Valid Months Jan-Dec
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related Deferred Tax Liability Payment due with a tax return, or an IRS notice 8612 Return of Excise Tax on Undistributed Income of Real Estate Investment Trust Payment due with a tax return, or an IRS notice 8613 Return of Excise Tax on Undistributed Income of Regulated Investment Companies	Tax Code 82887 Tax Code 84047 Tax Code	Valid Months Jan-Dec Valid Months Jan-Dec Valid Months Jan-Dec
Payment due with a tax return, or an IRS notice 8288 Withholding Return for Disposition by Foreign Persons of US Property Payment due with a tax return, or an IRS notice 8404 Interest Charge on DISC-Related Deferred Tax Liability Payment due with a tax return, or an IRS notice 8612 Return of Excise Tax on Undistributed Income of Real Estate Investment Trust Payment due with a tax return, or an IRS notice 8613 Return of Excise Tax on Undistributed Income of Regulated	Tax Code 82887 Tax Code 84047 Tax Code 86127 Tax Code	Valid Months Jan-Dec Valid Months Jan-Dec Valid Months Jan-Dec Valid Months

8697 Interest Under the Look-Back	Tax Code	Valid Months
Method for Completed Long-Term		
Contracts		
Payment due with a tax return, or an IRS	86977	Jan-Dec
notice		
8725 Excise Tax of Greenmail	Tax Code	Valid Months
Payment due on an IRS notice	87257	Jan-Dec
8752 Required Payment or Refund	Tax Code	Valid Months
Under Section 7519	j	
Payment due with a tax return, or an IRS	87527	December
notice		
8804 Annual Partnership Withholding	Tax Code	Valid Months
Tax		
Payment due with a tax return, or an IRS	88047	Jan-Dec
notice		
CT-1 Railroad Retirement Tax and	Tax Code	Valid Months
Unemployment Return		:
Federal Tax Deposit (with optional	10005	December
sub-categories)		
Payment due with a tax return, or an IRS	10007	
notice		

Tax Code Conversion Table for Individual Taxpayers

706 Estate Tax	Tax Code	Valid Months
An estimated payment	07066	- 00 -
Payment due with a tax return, an	07067	
extension, or an IRS notice		
706A US Additional Tax Return	Tax Code	Valid Months
Payment due with a tax return, or an IRS	70617	Jan-Dec
notice		
706GS(D) Generation-Skipping	Tax Code	Valid Months
Transfer Tax Return for Distribution		
Payment due with a tax return, or an IRS	70627	December
notice		
709 Gift Tax Return	Tax Code	Valid Months
Payment due with a tax return, an	07097	December
extension, or an IRS notice		
An estimated payment	07096	
720M Monthly Federal Excise Tax	Tax Code	Valid Months
Return		
Payment due with a tax return, or an IRS	07207	March, June,
notice (with optional sub-categories)		September &
		December

926 Return by Transferor of	Tax Code	Valid Months
Property to Foreign Corporation,		
Estate, Trust or Partnership		
Payment due with a tax return, or an IRS	09267	December
notice		
990BL Information & Initial Excise Tax	Tax Code	Valid Months
Return for Black Lung Benefit Trust		
Payment due with a tax return, or an IRS	99017	Jan-Dec
notice		(FY - month)
1040 Individual Income Tax	Tax Code	Valid Months
Estimated Payment (1040ES)	10406	December
Payment due with a tax return, extension,	10407	(or FY-month)
or an IRS notice		
An amended return	10400	
An advance payment for a CP2000	10404	
1066 Real Estate Mortgage Investment	Tax Code	Valid Months
Conduit Income Tax		
Payment due on an IRS notice	10667	Jan-Dec
1120DISC Domestic International	Tax Code	Valid Months
Sales Corporation Return		
Payment due with a tax return, or an IRS	11217	Jan-Dec
notice		(FY - month)
2438 Regulated Investment Company -	Tax Code	Valid Months
Undistributed Capital Gains Tax		
Return		
Payment due with a tax return, or an IRS	24387	December
notice		
3520 Information Return - Creation	Tax Code	Valid Months
of, or Transfer to Certain Foreign		
Trusts		
Payment due with a tax return, or an IRS	35207	December
notice		
5329 Return for Individual Retirement	Tax Code	Valid Months
Arrangement Taxes		
Payment due with a tax return, or an IRS	53297	Jan-Dec
notice		(FY month)
5811 Examination Return Preparer	Tax Code	Valid Months
Case Closing Document	504 15	
Payment due with a tax return, or an IRS	58117	Jan-Dec
notice	.	
6069 Return of Excess Tax on Excess	Tax Code	Valid Months
Contribution to Black Lung Benefit		
Trust	60.60=	
Payment due with a tax return, or an IRS	60697	December
notice		

IRC7803(c) Information Return for	Tax Code	Valid Months
Tax Exempt Private Activity		
Payment due with a tax return, or an IRS	80387	Jan-Dec
notice		
8288 Withholding Tax Return for	Tax Code	Valid Months
Disposition by Foreign Persons of US		
Property		
Payment due with a tax return, or an IRS	82887	Jan-Dec
notice		
8404 Computation of Interest Charge	Tax Code	Valid Months
on DISC-Related Deferred Tax Liability		
Payment due with a tax return, or an IRS	84047	Jan-Dec
notice		
8612 Return of Excise Tax on	Tax Code	Valid Months
Undistributed Income of Real Estate		
Investment Trust		
Payment due with a tax return, or an IRS	86127	Jan-Dec
notice		
8613 Return of Excise Tax on	Tax Code	Valid Months
Undistributed Income of Regulated		
Investment Companies		
Payment due with a tax return, or an IRS	86137	Jan-Dec
notice		
8697 Interest Computation Under the	Tax Code	Valid Months
Look-Back Method for Completed		
Long-Term Contracts		
Payment due with a tax return, or an IRS	86977	Jan-Dec
notice		
8725 Excise Tax of Greenmail		Valid Months
Payment due on an IRS notice	87257	Jan-Dec
Annual Return for Partnership		Valid Months
Withholding Tax		
Payment due with a tax return, or an IRS		Jan-Dec
notice		

Appendix B: Database Tables Overview of Database Tables

Table Name	Content/Use
Build	Information that identifies which version of EFTPS-PC 122 is running when the user selects "About EFTPS-PC" from the Help menu.
Error Codes	TPS 130 error codes and corresponding message text.
IRS Numbers	Sub-category codes for Tax Types 720 and 720M.

Payment Error Table	Payment IDs and related errors used by EFTPS-PC 122 to process RMBs 310 from TPS 130.
payments	Tax data input and related information.
reason	Tax payment reason codes and corresponding descriptions.
Sequence_ Translation	Sequence numbers sent to TPS 130 and corresponding payment IDs used by EFTPS-PC 122.
tax type	Tax type codes and related information.
Temp Import	Temporary storage for imported data during processing.
work_swm_temp	Work area for validating temporary data.

Table: Build Columns			
Build Number	Type = Text	Size = 3	
	Allow Zero Length:	No	
	Attributes:	Variable Length	
	Collating Order:	General	
	Column Hidden:	No	
	Column Order:	1	
	Column Width:	1275	
	Data Updatable:	No	
	Input Mask:	000	
	Ordinal Position:	0	
	Required:	No	
	Source Field:	Build Number	
	Source Table:	Build	
	Validate On Set:	No	
Release Date	Type = Date/Time	Size = 8	
	Allow Zero Length:	No	
	Attributes:	Fixed Size	
	Collating Order:	Unknown or Undefined	
	Column Hidden:	No	
	Column Order:	Default	
	Column Width:	1245	
	Data Updatable:	No	
	Format:	Short Date	
	Ordinal Position:	1	
	Required:	No	
	Source Field:	Release Date	
	Source Table:	Build	
	Validate On Set:	No	
Release Time	Type = Date/Time	Size = 8	
	Allow Zero Length:	No	

45

Attributes:

Fixed Size

Collating Order:

Unknown or Undefined

Column Hidden:

No Default

Column Order: Column Width:

1320

Data Updatable: Format:

No Medium Time

Ordinal Position:

No

Required: Source Field:

Source Table:

Release Time

Build No

Validate On Set:

Type = Text

Size = 64

Allow Zero Length:

No

Attributes:

Variable Length

Collating Order:

General

Column Hidden:

No

Column Order: Column Width: Default 2700

Data Updatable:

No

Ordinal Position: Required:

3 No

Source Field:

Last Import Export

Delimited

Source Table:

Build

Validate On Set:

No

Last Import Export Fixed

Last Import Export Delimited

Type = Text

Size = 64

Allow Zero Length:

No

Attributes:

Variable Length

Collating Order:

General

Column Hidden:

No

Column Order:

Default

Column Width:

2355

Data Updatable:

No

Ordinal Position:

4

Required:

No

Source Field:

Last Import Export Fixed

Source Table:

Build

Validate On Set:

No

Table: Build Indexes

PrimaryKey

of Fields = 1

Clustered:

No

Distinct Count:

1

46

Foreign: No Ignore Nulls: No

Name: PrimaryKey

Primary: Yes Required: Yes Unique: Yes

Fields: Build Number, Ascending

Table: Error Codes Columns

Error Code Type = Text Size = 8

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Column Hidden: No
Column Order: 1
Column Width: 960
Data Updatable: No

Description: Error code from host.

Ordinal Position: 0 Required: No

Source Field: Error Code
Source Table: Error Codes

Validate On Set: No

Error Description Type = Text Size = 200

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Column Hidden: No
Column Order: Default
Column Width: 8040
Data Updatable: No

Description: Descriptive reason for error.

Ordinal Position: 1 Required: No

Source Field: Error Description
Source Table: Error Codes

Validate On Set: No

Table: Error Codes Indexes

PrimaryKey # of Fields = 1

Clustered: No
Distinct Count: 33
Foreign: No
Ignore Nulls: No

Name: PrimaryKey

47

Primary: Yes Required: Yes Unique: Yes

Fields: Error Code, Ascending

Table: IRS Numbers Columns

IRS Number Type = Text Size = 3

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Column Hidden: No
Column Order: 1
Column Width: 600
Data Updatable: No

Description: IRS Numbers for Tax Type

720 & 720M

Input Mask: ###
Ordinal Position: 0
Required: No

Source Field: IRS Number Source Table: IRS Number

Validate On Set: No

Description Type = Text Size = 120

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Column Hidden: No
Column Order: Default
Column Width: 6945
Data Updatable: No
Ordinal Position: 1
Required: No

Source Field: Description
Source Table: IRS Numbers

Validate On Set: No

order id Type = Number Size = 2

(Integer)

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No
Column Order: Default
Column Width: Default
Data Updatable: No
Decimal Places: Auto
Default Value: 0

48

Description: For ordering in numerical

order

Ordinal Position: 2 Required: No

Source Field: ORDER ID
Source Table: IRS Numbers

Validate On Set: No

Table: IRS Numbers Indexes

PrimaryKey # of Fields = 1

Clustered: No
Distinct Count: 56
Foreign: No
Ignore Nulls: No

Name: PrimaryKey

Primary: Yes Required: Yes Unique: Yes

Fields: IRS Number, Ascending

Table: Payment Error Table Columns

Payment ID Type = Number Size = 4

(Long)

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Data Updatable: No Ordinal Position: 0 Required: No

Source Field: Payment ID

Source Table: Payment Error Table

Validate On Set: No

Error Code Type = Text Size = 8

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Data Updatable: No
Ordinal Position: 1
Required: No

Source Field: Error Code

Source Table: Payment Error Table

Validate On Set: No

Error Description Type = Text Size = 200

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General Data Updatable: No Ordinal Position: 2 Required: No

Source Field: Source Table:

Error Description Payment Error Table

Validate On Set:

No

Type = Text

Size = 4

Allow Zero Length:

No Variable Length

Attributes: Collating Order:

General

Data Updatable:

No

Ordinal Position:

3 No

Source Field:

Required:

Error Tag

Source Table:

Payment Error Table

Validate On Set:

No

Table: Payment Error Table Indexes

Payment ID # of Fields = 1

Clustered:

No

Distinct Count:

0

Foreign: Ignore Nulls:

No No

Name:

Payment ID

Primary: Required:

No No

Unique:

No

Fields:

Payment ID, Ascending

Table: payments Columns

Payment ID

Error Tag

Type = Number

Size = 4

(Long)

Allow Zero Length:

Attributes:

Fixed Size, Auto-Increment

Collating Order:

Unknown or Undefined

Data Updatable:

No

Ordinal Position:

1

No

Required:

No

Source Field:

Payment ID

Source Table:

payments

Validate On Set:

No

User ID

Type = Text

Size = 20

Allow Zero Length:

No

Attributes:

Variable Length

Collating Order: General Data Updatable: No Ordinal Position: 2 Required: No Source Field: User ID Source Table: payments Validate On Set: No tin Type = TextSize = 9Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No Ordinal Position: 3 Required: No Source Field: tin Source Table: payments Validate On Set: No pin Type = TextSize = 4Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No Ordinal Position: 4 Required: No Source Field: pin Source Table: payments Validate On Set: No tax type code Type = TextSize = 4Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No **Ordinal Position:** 5 Required: No Source Field: tax type code Source Table: payments Validate On Set: No reason code Type = TextSize = 1Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No Ordinal Position: 6 Required: No Source Field: reason code

Source Table:

Validate On Set:

payments

No

51

tax period Type = TextSize = 4Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No Ordinal Position: 7 Required: No Source Field: tax period Source Table: payments Validate On Set: No amount Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 8 Required: No Source Field: amount Source Table: payments Validate On Set: No verification code Type = TextSize = 2Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No Ordinal Position: 9 Required: No Source Field: verification code Source Table: payments Validate On Set: No requested Type = Date/Time Size = 8settlement date Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 10 Required: No Source Field: requested settlement date Source Table: payments Validate On Set: No actual settlement Type = Date/Time Size = 8date Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No

Ordinal Position: 11 Required: No Source Field: actual settlement date Source Table: payments Validate On Set: No override tax type Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 12 Required: No Source Field: override tax type Source Table: payments Validate On Set: No override threshold Type = Yes/N_0 Size = 1Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 13 Required: No Source Field: override threshold Source Table: payments Validate On Set: No override duplicate Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 14 Required: No Source Field: override duplicate Source Table: payments Validate On Set: No futa override Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 15 Required: No Source Field: futa override Source Table: payments Validate On Set: No filing period Type = Yes/NoSize = 1

override

subcategory count	Allow Zero Length: Attributes: Collating Order: Data Updatable: Ordinal Position: Required: Source Field: Source Table: Validate On Set: Type = Text	No Fixed Size Unknown or Undefined No 16 No filing period override payments No Size = 2
sassasses of count	Allow Zero Length:	No
	Attributes:	Variable Length
	Collating Order:	General
	Data Updatable:	No
	Ordinal Position:	17
	Required:	No
	Source Field:	subcategory count
	Source Table:	payments
aa amaa	Validate On Set:	No s: 0
ss amount	Type = Currency	Size = 8
	Allow Zero Length: Attributes:	No Fixed Size
	Collating Order:	Unknown or Undefined
	Data Updatable:	No
	Ordinal Position:	18
	Required:	No
	Source Field:	ss amount
	Source Table:	payments
	Validate On Set:	No
medicare amount	Type = Currency	Size = 8
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined
	Data Updatable: Ordinal Position:	No 19
	Required:	No
	Source Field:	medicare amount
	Source Table:	payments
	Validate On Set:	No
tax wh amount	Type = Currency	Size = 8
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined
	Data Updatable:	No
	Ordinal Position:	20
	Required:	No
	Source Field:	tax wh amount

	Source Table:	payments
	Validate On Set:	No
fica equivalent	Type = Currency	Size = 8
amount		
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined
	Data Updatable:	No
	Ordinal Position:	21
	Required:	No
	Source Field:	fica equivalent amount
	Source Table:	payments
	Validate On Set:	No
industry amount	Type = Currency	Size = 8
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined
	Data Updatable:	No
	Ordinal Position:	22
	Required:	No
	Source Field:	industry amount
	Source Table:	payments
	Validate On Set:	No
supplemental	Type = Currency	Size = 8
amount		
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined
	Data Updatable:	No
	Ordinal Position:	23
	Required:	No
	Source Field:	supplemental amount
	Source Table:	payments
·	Validate On Set:	No
irs#1	Type = Text	Size = 3
	Allow Zero Length:	No
	Attributes:	Variable Length
	Collating Order:	General
	Data Updatable:	No
	Ordinal Position:	24
	Required:	No
	Source Field:	irs#1
	Source Table:	payments
iwa amaanii 1	Validate On Set:	No
irs amount 1	Type = Currency	Size = 8
	Allow Zero Length:	No
	Attributes:	Fixed Size

Collating Order: Unknown or Undefined Data Updatable: No **Ordinal Position:** 25 Required: No Source Field: irs amount 1 Source Table: payments Validate On Set: No irs#2 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No Ordinal Position: 26 Required: No Source Field: irs#2 Source Table: payments Validate On Set: No irs amount 2 **Type = Currency** Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No **Ordinal Position:** 27 Required: No Source Field: irs amount 2 Source Table: payments Validate On Set: No irs#3 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length General Collating Order: Data Updatable: No **Ordinal Position:** 28 Required: No Source Field: irs#3 Source Table: payments Validate On Set: No irs amount 3 Type = CurrencySize = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 29 Required: No Source Field: irs amount 3 Source Table: payments

Validate On Set:

No

56

irs#4 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No **Ordinal Position:** 30 Required: No Source Field: irs#4 Source Table: payments Validate On Set: No irs amount 4 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No **Ordinal Position:** 31 Required: No Source Field: irs amount 4 Source Table: payments Validate On Set: No irs#5 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No **Ordinal Position:** 32 Required: No Source Field: irs#5 Source Table: payments Validate On Set: No irs amount 5 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No **Ordinal Position:** 33 Required: No Source Field: irs amount 5 Source Table: payments Validate On Set: No irs#6 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No Ordinal Position: 34 Required: No

Source Field: irs#6 Source Table: payments Validate On Set: No irs amount 6 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 35 Required: No Source Field: irs amount 6 Source Table: payments Validate On Set: No irs#7 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No **Ordinal Position:** 36 Required: No Source Field: irs#7 Source Table: payments Validate On Set: No irs amount 7 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 37 Required: No Source Field: irs amount 7 Source Table: payments Validate On Set: No irs#8 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No **Ordinal Position:** 38 Required: No Source Field: irs#8 Source Table: payments Validate On Set: No irs amount 8 **Type = Currency** Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined

58

Data Updatable: No Ordinal Position: 39 Required: No Source Field: irs amount 8 Source Table: payments Validate On Set: No irs#9 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No Ordinal Position: 40 Required: No Source Field: irs#9 Source Table: payments Validate On Set: No irs amount 9 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 41 Required: No Source Field: irs amount 9 Source Table: payments Validate On Set: No irs#10 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No Ordinal Position: 42 Required: No Source Field: irs#10 Source Table: payments Validate On Set: No irs amount 10 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 43 Required: No Source Field: irs amount 10 Source Table: payments

Validate On Set:

No

59

sent Type = NumberSize = 2(Integer) Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No Ordinal Position: 44 Required: No Source Field: sent Source Table: payments Validate On Set: No stage Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: **Ordinal Position:** 45 Required: No Source Field: stage Source Table: payments Validate On Set: No error Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Data Updatable: No **Ordinal Position:** 46 Required: No Source Field: error Source Table: payments Validate On Set: No acknowledgment Type = TextSize = 15number Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No **Ordinal Position:** 47 Required: No Source Field: acknowledgment number Source Table: payments Validate On Set: No user field 1 Type = TextSize = 25Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No

Ordinal Position: 48 Required: No Source Field: user field 1 Source Table: payments Validate On Set: No user field 2 Type = TextSize = 25Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No Ordinal Position: 49 Required: No Source Field: user field 2 Source Table: payments Validate On Set: No error1 Type = TextSize = 8Allow Zero Length: No Attributes: Variable Length Collating Order: General Data Updatable: No Ordinal Position: 50 Required: No Source Field: error1 Source Table: payments Validate On Set: No Table: payments Indexes **PrimaryKey** # of Fields = 1Clustered: No **Distinct Count:** 5 Foreign: No Ignore Nulls: No Name: **PrimaryKey** Primary: Yes Required: Yes Unique: Yes Fields: Payment ID, Ascending tax type # of Fields = 1Clustered: No **Distinct Count:** 4 Foreign: No Ignore Nulls: No Name: tax type Primary: No

Required:

Unique:

No

No

61

Fields:

tax type code, Ascending

tin

of Fields = 1

No

Distinct Count:

5

Foreign:

Clustered:

No

Ignore Nulls:

No

Name: Primary:

tin No

Required:

No

Unique:

No

Fields:

tin, Ascending

Table: reason Columns

Reason Code

Type = Text

Size = 1

Allow Zero Length:

No

Attributes:

Variable Length

Collating Order:

General

Column Hidden:

No

Column Order:

Default

Column Width: Data Updatable: 705

No

Description:

Reason for Tax Payment

Input Mask:

0

Ordinal Position: Required:

No

Source Field:

Source Table:

Reason Code reason

Validate On Set:

No

Reason Description Type = Text

Size = 120

Allow Zero Length:

No

Attributes:

Variable Length

Collating Order:

General

Column Hidden:

No

Column Order:

Default

Column Width:

8475

Data Updatable:

No Description of the reason

Description:

for this payment.

Ordinal Position:

1

Required:

No

Source Field:

Reason Description

reason

Source Table:

Validate On Set:

No

Table: reason Indexes

PrimaryKey # of Fields = 1

Clustered: No
Distinct Count: 6
Foreign: No

Ignore Nulls: No

Name: Primary: PrimaryKey Yes

Required: Unique:

Yes Yes

Fields:

Reason Code, Ascending

Table: Sequence_Translation Columns

Sequence Type = Text Size = 4

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Data Updatable: No
Ordinal Position: 0
Required: No

Source Field: Sequence

Source Table: Sequence Translation

Validate On Set:

No

Payment ID Type = Number Size = 4

(Long)

Allow Zero Length: No

Attributes:

Fixed Size

Collating Order:

Unknown or Undefined

Data Updatable: No Ordinal Position: 1 Required: No

Source Field:

Payment ID

Source Table:

Sequence Translation

Validate On Set:

No

Table: Sequence_Translation Indexes

PrimaryKey # of Fields = 1

5

Clustered: No
Distinct Count: 1
Foreign: No
Ignore Nulls: No

Name: PrimaryKey

Primary: Yes Required: Yes

63

Unique: Yes

Fields: Sequence, Ascending

Table: tax type Columns

Tax Type Code Type = Text Size = 4

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Column Hidden: No
Column Order: Default
Column Width: 525
Data Updatable: No

Description: Tax Type code - 4 digit

Input Mask: ####
Ordinal Position: 0
Required: No

Source Field: Tax Type Code

Source Table: tax type Validate On Set: No

Validation Text: MUST BE NUMBER

Tax Type Name Type = Text Size = 10

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Column Hidden: No
Column Order: Default
Column Width: 960
Data Updatable: No

Description: Tax Type name - 4

character

Ordinal Position: 1 Required: No

Source Field: Tax Type Name

Source Table: tax type
Validate On Set: No

Type = Number Size = 2

ordering id Type = Number (Integer)

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No
Column Order: Default
Column Width: 630
Data Updatable: No
Decimal Places: Auto
Default Value: 0

Description: Allows ordering of pick list Ordinal Position: Required: No Source Field: ordering id

Source Table: tax type Validate On Set: No Type = TextSize = 85

Tax Type Description

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General Column Hidden: No Column Order: Default Column Width: 7065 Data Updatable: No

Description: Description of the Tax

Form Payment is for.

Ordinal Position: 3 Required: No

Source Field: Tax Type Description

Source Table: tax type Validate On Set: No

Table: tax type Indexes

PrimaryKey

of Fields = 1

Clustered: No Distinct Count: 45 Foreign: No Ignore Nulls: No

Name: PrimaryKey Primary: Yes

Required: Yes Unique: Yes

Fields: Tax Type Code, Ascending

Table: Temp Import Columns

User ID Type = TextSize = 20Allow Zero Length: No

Attributes: Variable Length

Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 1

Required: No
Source Field: User ID
Source Table: Temp Import
Validate On Set: No
Type = Toyt

tin Type = Text Size = 9

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 2 Required: No Source Field: tin

Source Table: Temp Import

Validate On Set: No

pin Type = Text Size = 4

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 3 Required: No Source Field: pin

Source Table: Temp Import

Validate On Set: No

tax type code Type = Text Size = 4

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Column Hidden: No
Column Order: Default
Column Width: Default
Data Updatable: No
Ordinal Position: 4
Required: No

Source Field: tax type code Source Table: Temp Import

Validate On Set: No

reason code Type = Text Size = 1

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General

Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 5 Required: No Source Field: reason code Source Table: Temp Import Validate On Set: No tax period Type = TextSize = 4Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 6 Required: No Source Field: tax period Source Table: Temp Import Validate On Set: No amount Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 7 Required: No Source Field: amount Source Table: Temp Import Validate On Set: No verification code Type = TextSize = 2Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 8 Required: No Source Field: verification code

Source Table: Temp Import Validate On Set: No requested Type = Date/Time Size = 8settlement date Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 9 Required: No Source Field: requested settlement date Source Table: Temp Import Validate On Set: No actual settlement Type = Date/Time Size = 8date Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 10 Required: No Source Field: actual settlement date Source Table: Temp Import Validate On Set: No override tax type Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 11 Required: No Source Field: override tax type Source Table: Temp Import Validate On Set: No override threshold Type = Yes/N_0 Size = 1Allow Zero Length: No Fixed Size Attributes: Collating Order: Unknown or Undefined

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Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 12 Required: No

Source Field: override threshold Source Table: Temp Import

Validate On Set: No

override duplicate

Type = Yes/NoSize = 1

Allow Zero Length: No Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 13 Required: No

Source Field: override duplicate Source Table: Temp Import

Validate On Set: No

futa override

Type = Yes/NoSize = 1

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 14 Required: No

Source Field: futa override Source Table: Temp Import

Validate On Set: No Type = Yes/NoSize = 1

filing period override

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 15 Required: No

Source Field: filing period override

subcategory count	Source Table: Validate On Set: Type = Text	Temp Import No Size = 2
9. 7	Allow Zero Length:	No
	Attributes:	Variable Length
	Collating Order:	General
	Column Hidden:	No
	Column Order:	Default
	Column Width:	Default
	Data Updatable:	No
	Ordinal Position:	16
	Required:	No
	Source Field:	subcategory count
	Source Table:	Temp Import
	Validate On Set:	No
ss amount	Type = Currency	Size = 8
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined
	Column Hidden:	No
	Column Order:	Default
	Column Width:	Default
	Data Updatable:	No
	Decimal Places: Ordinal Position:	Auto
	Required:	17 No.
	Source Field:	No
	Source Table:	ss amount
	Validate On Set:	Temp Import No
medicare amount	Type = Currency	Size = 8
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined
	Column Hidden:	No
	Column Order:	Default
	Column Width:	Default
	Data Updatable:	No
	Decimal Places:	Auto
	Ordinal Position:	18
	Required:	No
	Source Field:	medicare amount
	Source Table:	Temp Import
	Validate On Set:	No
tax wh amount	Type = Currency	Size = 8
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined

70

Column Hidden: No
Column Order: Default
Column Width: Default
Data Updatable: No
Decimal Places: Auto
Ordinal Position: 19
Required: No

Source Field: tax wh amount Source Table: Temp Import

Validate On Set: No

fica equivalent amount

Type = Currency Size = 8

Allow Zero Length: No
Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No
Column Order: Default
Column Width: Default
Data Updatable: No
Decimal Places: Auto
Ordinal Position: 20
Required: No

Source Field: fica equivalent amount

Source Table: Temp Import

Validate On Set: No

industry amount

Type = Currency Size = 8

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No
Column Order: Default
Column Width: Default
Data Updatable: No
Decimal Places: Auto
Ordinal Position: 21
Required: No

Source Field: industry amount Source Table: Temp Import

Validate On Set: No **Type = Currency** Size = 8

supplemental amount

Allow Zero Length: No

Attributes: Fixed Size

Attitudes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No
Column Order: Default
Column Width: Default

71

Data Updatable: No Decimal Places: Auto Ordinal Position: 22 Required: No Source Field: supplemental amount Source Table: Temp Import Validate On Set: No irs#1 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 23 Required: No Source Field: irs#1 Source Table: Temp Import Validate On Set: No irs amount 1 Type = CurrencySize = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 24 Required: No Source Field: irs amount 1 Source Table: Temp Import Validate On Set: No irs#2 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 25 Required: No Source Field: irs#2

Source Table:

Validate On Set:

Temp Import

No

72

irs amount 2 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: Nο Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 26 Required: No Source Field: irs amount 2 Source Table: Temp Import Validate On Set: No irs#3 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 27 Required: No Source Field: irs#3 Source Table: Temp Import Validate On Set: No irs amount 3 Type = CurrencySize = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto **Ordinal Position:** 28 Required: No Source Field: irs amount 3 Source Table: Temp Import Validate On Set: No irs#4 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default

73

Column Width: Default Data Updatable: No **Ordinal Position:** 29 Required: No Source Field: irs#4

Source Table: Temp Import

Validate On Set: No

irs amount 4 Type = Currency Size = 8

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 30 Required: No

Source Field: irs amount 4 Source Table: Temp Import

Validate On Set: No

irs#5 Type = TextSize = 3

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 31

Required: No Source Field: irs#5

Source Table: Temp Import

Validate On Set: No

irs amount 5 Type = Currency Size = 8

Allow Zero Length: No Attributes:

Fixed Size

Unknown or Undefined Collating Order:

Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Decimal Places:** Auto Ordinal Position: 32 Required: No

Source Field: irs amount 5 Source Table: Temp Import

74

Validate On Set: No irs#6 Tvpe = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 33 Required: No Source Field: irs#6 Source Table: Temp Import Validate On Set: No irs amount 6 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto **Ordinal Position:** 34 Required: No Source Field: irs amount 6 Source Table: Temp Import Validate On Set: No irs#7 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 35 Required: No irs#7 Source Field: Source Table: Temp Import Validate On Set: No irs amount 7 Type = Currency Size = 8Allow Zero Length: No Fixed Size Attributes: Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default

75

Column Width: Default Data Updatable: No Decimal Places: Auto **Ordinal Position:** 36 Required: No

Source Field: irs amount 7 Source Table: Temp Import

Validate On Set: No

irs#8 Type = TextSize = 3

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 37 Required: No Source Field: irs#8

Source Table: Temp Import

Validate On Set: No

irs amount 8 Type = Currency Size = 8

> Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 38 Required: No

Source Field: irs amount 8 Source Table: Temp Import

Validate On Set: No

Type = TextSize = 3

> Allow Zero Length: No

Attributes: Variable Length

Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 39

Required: No

Source Field: irs#9

Source Table: Temp Import

irs#9

Validate On Set: No irs amount 9 Size = 8Type = Currency Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 40 Required: No Source Field: irs amount 9 Source Table: Temp Import Validate On Set: No irs#10 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 41 Required: No Source Field: irs#10 Source Table: Temp Import Validate On Set: No irs amount 10 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 42 Required: No Source Field: irs amount 10 Source Table: Temp Import Validate On Set: No sent Type = NumberSize = 2(Integer) Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined

	Column Hidden:	No
	Column Order:	Default
	Column Width:	Default
	Data Updatable:	No
	Decimal Places:	Auto
	Default Value:	0
	Ordinal Position:	43
	Required:	No
	Source Field:	sent
	Source Table:	Temp Import
	Validate On Set:	No
stage	Type = Number	Size = 2
54460	(Integer)	Size – Z
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined
	Column Hidden:	No
	Column Order:	
		Default
	Column Width:	Default
	Data Updatable: Decimal Places:	No
	Default Value:	Auto
		0
	Ordinal Position:	44 N
	Required:	No
	Source Field:	stage
	Source Table:	Temp Import
0.WW0.W	Validate On Set:	No
error	Type = Yes/No	Size = 1
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined
	Column Hidden:	No
	Column Order:	Default
	Column Width:	Default
	Data Updatable:	No
	Ordinal Position:	45
	Required:	No
	Source Field:	error
	Source Table:	Temp Import
	Validate On Set:	No
acknowledgment	$\mathbf{Type} = \mathbf{Text}$	Size = 15
number		
	Allow Zero Length:	No
	Attributes:	Variable Length
	Collating Order:	General
	Column Hidden:	No
	Column Order:	Default

78

Column Width: Default Data Updatable: No Ordinal Position: 46 Required: No Source Field: acknowledgment number Source Table: Temp Import Validate On Set: No user field 1 Type = TextSize = 25Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 47 Required: No Source Field: user field 1 Source Table: Temp Import Validate On Set: No user field 2 Type = TextSize = 25Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 48 Required: No Source Field: user field 2 Source Table: Temp Import Validate On Set: No error1 Type = TextSize = 8Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 49 Required: No Source Field: error1 Source Table: Temp Import

Validate On Set:

No

Table: Temp Import Indexes

tax type # of Fields = 1

Clustered: No

Distinct Count: 0

Foreign: No

Ignore Nulls: No

Name: tax type
Primary: No
Required: No

Unique: No

Fields: tax type code, Ascending

tin # of Fields = 1

Clustered: No
Distinct Count: 0
Foreign: No
Ignore Nulls: No
Name: tin

Primary: No Required: No Unique: No

Fields: tin, Ascending

Table: work swm temp Columns

User ID Type = Text Size = 20

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Column Hidden: No
Column Order: Default
Column Width: Default
Data Updatable: No

Ordinal Position: 1
Required: No
Source Field: User ID

Source Table: work swm temp

Validate On Set: No

tin Type = Text Size = 9

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Column Hidden: No
Column Order: Default
Column Width: Default
Data Updatable: No

	0.11.15.11	
	Ordinal Position:	2
	Required:	No
	Source Field:	tin
	Source Table:	work_swm_temp
	Validate On Set:	No
tax type code	$\mathbf{Type} = \mathbf{Text}$	Size = 4
	Allow Zero Length:	No
	Attributes:	Variable Length
	Collating Order:	General
	Column Hidden:	No
	Column Order:	Default
	Column Width:	Default
	Data Updatable:	No
	Ordinal Position:	3
	Required:	No
	Source Field:	tax type code
	Source Table:	work swm temp
	Validate On Set:	No
reason code	Type = Text	$\mathbf{Size} = 1$
A CHISCIA COLLE	Allow Zero Length:	No
	Attributes:	
	Collating Order:	Variable Length General
	Column Hidden:	No
	Column Order:	
		Default
	Column Width:	Default
	Data Updatable:	No
	Ordinal Position:	4
	Required:	No
	Source Field:	reason code
	Source Table:	work_swm_temp
	Validate On Set:	No
tax period	$\mathbf{Type} = \mathbf{Text}$	Size = 4
	Allow Zero Length:	No
	Attributes:	Variable Length
	Collating Order:	General
	Column Hidden:	No
	Column Order:	Default
	Column Width:	Default
	Data Updatable:	No
	Ordinal Position:	5
	Required:	No
	Source Field:	tax period
	Source Table:	work_swm_temp
	Validate On Set:	No
amount	Type = Currency	Size = 8
	Allow Zero Length:	No
	Attributes:	Fixed Size

Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 6 Required: No Source Field: amount Source Table: work swm temp Validate On Set: No verification code Type = TextSize = 2Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 7 Required: No Source Field: verification code Source Table: work swm temp Validate On Set: No requested Type = Date/Time Size = 8settlement date Allow Zero Length: No Fixed Size Attributes: Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 8 Required: No Source Field: requested settlement date Source Table: work swm temp Validate On Set: No override tax type Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 9

Required: No Source Field: override tax type Source Table: work swm temp Validate On Set: No override threshold Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 10 Required: No Source Field: override threshold Source Table: work swm temp Validate On Set: No override duplicate Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 11 Required: No Source Field: override duplicate Source Table: work swm temp Validate On Set: No futa override Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 12 Required: No Source Field: futa override Source Table: work swm temp Validate On Set: No filing period Type = Yes/NoSize = 1override Allow Zero Length: No Attributes: Fixed Size

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Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 13 Required: No Source Field: filing period override Source Table: work swm temp Validate On Set: No subcategory count Type = TextSize = 2Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 14 Required: No Source Field: subcategory count Source Table: work swm temp Validate On Set: No ss amount Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto **Ordinal Position:** 15 Required: No Source Field: ss amount Source Table: work_swm_temp Validate On Set: No medicare amount Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 16

Required: No Source Field: medicare amount Source Table: work_swm_temp Validate On Set: No tax wh amount Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 17 Required: No Source Field: tax wh amount Source Table: work swm temp Validate On Set: No fica equivalent Type = Currency Size = 8amount Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 18 Required: No Source Field: fica equivalent amount Source Table: work swm temp Validate On Set: No industry amount Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 19 Required: No Source Field: industry amount Source Table: work swm temp Validate On Set: No

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supplemental amount	Type = Currency	Size = 8
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined
	Column Hidden:	No
	Column Order:	Default
	Column Width:	Default
	Data Updatable:	No
	Decimal Places:	Auto
	Ordinal Position:	20
	Required:	No
	Source Field:	supplemental amount
	Source Table:	work swm temp
	Validate On Set:	No 1
irs#1	Type = Text	Size = 3
	Allow Zero Length:	No
	Attributes:	Variable Length
	Collating Order:	General
	Column Hidden:	No
	Column Order:	Default
	Column Width:	Default
	Data Updatable:	No
	Ordinal Position:	21
	Required:	No
	Source Field:	irs#1
	Source Table:	work swm temp
	Validate On Set:	No
irs amount 1	Type = Currency	Size = 8
	Allow Zero Length:	No
	Attributes:	Fixed Size
	Collating Order:	Unknown or Undefined
	Column Hidden:	No
	Column Order:	Default
	Column Width:	Default
	Data Updatable:	No
	Decimal Places:	Auto
	Ordinal Position:	22
	Required:	No
	Source Field:	irs amount 1
	Source Table:	work_swm_temp
	Validate On Set:	No
irs#2	$\mathbf{Type} = \mathbf{Text}$	Size = 3
	Allow Zero Length:	No
	Attributes:	Variable Length
	Collating Order:	General
	Column Hidden:	No

Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 23 Required: No Source Field: irs#2

Source Table: work swm temp

Validate On Set:

irs amount 2

Type = CurrencySize = 8

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

No

Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 24 Required: No

Source Field: irs amount 2 Source Table: work_swm_temp

Validate On Set:

No

irs#3 Type = TextSize = 3

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 25 Required: No Source Field: irs#3

Source Table: work swm temp

Validate On Set: No

irs amount 3 Type = Currency Size = 8

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 26 Required: No

Source Field: irs amount 3

Source Table: work swm temp Validate On Set: No irs#4 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 27 Required: No Source Field: irs#4 Source Table: work swm temp Validate On Set: No irs amount 4 Type = CurrencySize = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto **Ordinal Position:** 28 Required: No Source Field: irs amount 4 Source Table: work_swm_temp Validate On Set: No irs#5 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 29 Required: No Source Field: irs#5 Source Table: work swm temp Validate On Set: No irs amount 5 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No

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Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 30 Required: No

Source Field: irs amount 5 Source Table: work swm temp

Validate On Set: No

irs#6 Type = TextSize = 3Allow Zero Length: No

> Attributes: Variable Length

Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 31 Required: No Source Field: irs#6

Source Table: work swm temp

Validate On Set: No

irs amount 6 Type = Currency Size = 8

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 32 Required: No

Source Field: irs amount 6 Source Table: work swm temp

Validate On Set: No Type = TextSize = 3

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 33 Required: No Source Field: irs#7

irs#7

Source Table: work_swm_temp Validate On Set: No irs amount 7 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Unknown or Undefined Collating Order: Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 34 Required: No Source Field: irs amount 7 Source Table: work_swm_temp Validate On Set: irs#8 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 35 Required: No Source Field: irs#8 Source Table: work swm temp Validate On Set: No irs amount 8 Type = Currency Size = 8Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 36 Required: No Source Field: irs amount 1 Source Table: work_swm_temp Validate On Set: No irs#9 Type = TextSize = 3Allow Zero Length: No Attributes: Variable Length Collating Order: General

90

Column Hidden: No
Column Order: Default
Column Width: Default
Data Updatable: No
Ordinal Position: 37
Required: No
Source Field: irs#9

Source Table:

work swm temp

Validate On Set:

No

irs amount 9 Type = Currency Size = 8

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No
Column Order: Default
Column Width: Default
Data Updatable: No
Decimal Places: Auto
Ordinal Position: 38
Required: No

Source Field: irs amount 9
Source Table: work swm temp

Validate On Set: No

irs#10 Type = Text Size = 3

Allow Zero Length: No

Attributes: Variable Length

Collating Order: General
Column Hidden: No
Column Order: Default
Column Width: Default
Data Updatable: No
Ordinal Position: 39
Required: No

Source Field: irs#10

Source Table: work_swm_temp

Validate On Set: No

irs amount 10 Type = Currency Size = 8

Allow Zero Length: No

Attributes: Fixed Size

Collating Order: Unknown or Undefined

Column Hidden: No
Column Order: Default
Column Width: Default
Data Updatable: No
Decimal Places: Auto
Ordinal Position: 40

Required: No

91

Source Field: irs amount 10 Source Table: work swm temp Validate On Set: No stage Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 41 Required: No Source Field: stage Source Table: work swm temp Validate On Set: No user field 1 Type = TextSize = 25Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 42 Required: No Source Field: user field 1 Source Table: work swm temp Validate On Set: No user field 2 Type = TextSize = 25Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No **Ordinal Position:** 43 Required: No Source Field: user field 2 Source Table: work_swm_temp Validate On Set: No pin Type = TextSize = 4Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No

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Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 44 Required: No Source Field: pin Source Table: work_swm_temp Validate On Set: No actual settlement Type = Date/Time Size = 8date Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 45 Required: No Source Field: actual settlement date Source Table: work swm temp Validate On Set: No sent Type = NumberSize = 2(Integer) Allow Zero Length: No Attributes: Fixed Size Collating Order: Unknown or Undefined Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Decimal Places: Auto Ordinal Position: 46 Required: No Source Field: sent Source Table: work swm_temp Validate On Set: No error Type = Yes/NoSize = 1Allow Zero Length: No Attributes: Fixed Size Unknown or Undefined Collating Order: Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 47 Required: No

Source Field:

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error

Source Table: work swm temp Validate On Set: No acknowledgment Type = TextSize = 15number Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 48 Required: No acknowledgment number Source Field: Source Table: work swm temp Validate On Set: No error1 Type = TextSize = 8Allow Zero Length: No Attributes: Variable Length Collating Order: General Column Hidden: No Column Order: Default Column Width: Default Data Updatable: No Ordinal Position: 49 Required: No Source Field: error1 Source Table: work swm temp Validate On Set: No Table: work_swm_temp Indexes tax type # of Fields = 1Clustered: No **Distinct Count:** 0 Foreign: No Ignore Nulls: No Name: tax type Primary: No Required: No Unique: No

tin

of Fields = 1

Fields:

Clustered: No **Distinct Count:** 0 Foreign:

No

tax type code, Ascending

Ignore Nulls: No
Name: tin
Primary: No
Required: No
Unique: No

Fields: tin, Ascending

Appendix C: Import/Export Data Files Import Data File

Field Name	Data Type	Start	Width
user ID	Text	1	20
TIN	Text	21	9
tax type code	Text	30	4
reason code	Text	34	1
tax period	Text	35	4
amount	Currency	39	21
verification code	Text	60	2
request settlement	Date/Time	62	19
override tax type	Yes/No	81	1
override threshold	Yes/No	82	1
override duplicate	Yes/No	83	1
futa override	Yes/No	84	1
filing period override	Yes/No	85	1
sub-category count	Text	86	2
SS amount	Currency	88	21
medicare amount	Currency	109	21
tax wh amount	Currency	130	21
fica equivalent amount	Currency	151	21
industry amount	Currency	172	21
supplement amount	Currency	193	21
IRS #1	Text	214	3
IRS amount 1	Currency	217	21
ins #2	Text	238	3
IRS amount 2	Currency	241	21
IRS #3	Text	262	3
IRS amount 3	Currency	265	21
IRS #4	Text	286	3
IRS amount 4	Currency	289	21
IRS #5	Text	310	3
IRS amount 5	Currency	313	21
IRS #6	Text	334	3
IRS amount 6	Currency	337	21
IRS #7	Text	358	3

IRS amount 7	Currency	361	21
IRS #8	Text	382	3
IRS amount 8	Currency	385	21
IRS #9	Text	406	3
IRS amount 9	Currency	409	21
IRS #10	Text	430	3
IRS amount 10	Currency	433	21
stage	Yes/No	454	1
user field 1	Text	455	25
user field 2	Text	480	25
PIN	Text	505	4

Note: If certain data elements are not applicable or are to be excluded, completely omit those data elements from the string.

Export Data File

Field Name	Data Type	Start	Width
User ID	Text	1	20
TIN	Text	21	9
tax type code	Text	30	4
reason code	Text	34	1
tax period	Text	35	4
amount	Currency	39	21
verification code	Text	60	2
request settlement	Date/Time	62	19
override tax type	Yes/No	81	1
override threshold	Yes/No	82	1
override duplicate	Yes/No	83	1
futa override	Yes/No	84	1
filing period override	Yes/No	85	1
sub-category count	Text	86	2
SS amount	Currency	88	21
medicare amount	Currency	109	21
tax wh amount	Currency	130	21
fica equivalent amount	Currency	151	21
industry amount	Currency	172	21
supplement amount	Currency	193	21
IRS #1	Text	214	3
IRS amount 1	Currency	217	21
IRS #2	Text	238	3
IRS amount 2	Currency	241	21
IRS #3	Text	262	3
IRS amount 3	Currency	265	21
IRS #4	Text	286	3

Field Name	Data Type	Start	Width
IRS amount 4	Currency	289	21
IRS #5	Text	310	3
IRS amount 5	Currency	313	21
IRS #6	Text	334	3
IRS amount 6	Currency	337	21
IRS #7	Text	358	3
IRS amount 7	Currency	361	21
IRS #8	Text	382	3
IRS amount 8	Currency	385	21
IRS #9	Text	406	3
IRS amount 9	Currency	409	21
IRS #10	Text	430	3
IRS amount 10	Currency	433	21
stage	Yes/No	454	1
user field 1	Text	455	25
user field 2	Text	480	25
PIN	Text	505	4
actual settlement date	Date/Time	509	19
sent	Integer	528	6
error	Yes/No	534	1
EFT num	Text	535	15
error 1	Text	550	8

CLAIMS

What is claimed is:

1	1.	A method for facilitating the input of tax data into a computer, said tax
2	data including	one or more data entries, comprising the steps of:
3		requesting that a user enter said data entries into one or more data entry

4 fields;

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receiving said data entries from said data entry fields; and
determining whether one or more of said data entries satisfies a
corresponding validity criterion.

- 1 2. The method of claim 1, further comprising the step of notifying said 2 user if one of said data entries does not satisfy a validity criterion corresponding to 3 said data entry.
- 1 3. The method of claim 2, further comprising the step of receiving a new data entry to replace one of said data entries.
- 1 4. The method of claim 1, further comprising the step of submitting said 2 tax data for processing if said user indicates that said tax data is ready for submission.
 - 5. The method of claim 1, wherein at least one of said data entry fields has an associated set of choices from which said user selects an item.
- 1 6. The method of claim 5, wherein said set of choices is presented to said 2 user as a drop-down list.
 - 7. The method of claim 1, wherein said tax data is stored in a table.
- 1 8. The method of claim 7, wherein a relational database contains said 2 table.
- 9. The method of claim 1, wherein said step of determining whether one or more of said data entries satisfies a corresponding validity criterion is performed as each of said data entries is received.
 - 10. The method of claim 1, wherein said step of determining whether one or more of said data entries satisfies a corresponding validity criterion is performed after all of said data entries are received.
- 1 11. The method of claim 1, wherein a validity criterion corresponding to at least one of said data entries is pre-defined.

1 12. The method of claim 1, wherein a validity criterion corresponding to at least one of said data entries is dependent upon another of said data entries.

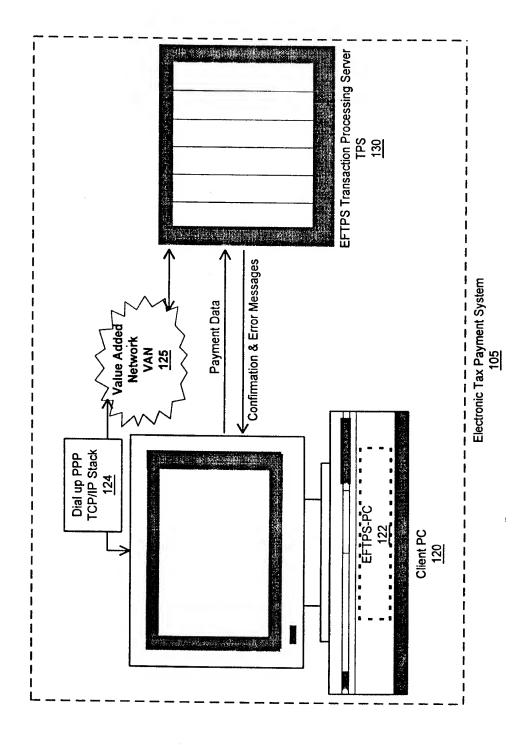
- 1 13. The method of claim 1, wherein a validity criterion corresponding to at
- 2 least one of said data entries is a data format edit.
- 1 14. The method of claim 13, wherein said data format edit is a nine digit 2 taxpayer identification number (TIN).
- 1 15. The method of claim 13, wherein said data format edit is a four digit 2 personal identification number (PIN).
- 1 16. The method of claim 1, wherein a validity criterion corresponding to at 2 least one of said data entries is a data content edit.
- 1 The method of claim 16, wherein said data content edit is a valid 2 settlement date.
- 1 18. The method of claim 16, wherein said data content edit is a verification 2 code based on an amount entered by said user.
- 1 19. The method of claim 16, wherein said data content edit is a valid tax 2 form.
- 1 20. The method of claim 16, wherein said data content edit is a valid tax 2 period for a valid tax form.
- 1 21. The method of claim 16, wherein said data content edit is a valid 2 reason code for a valid tax form.
- 1 22. The method of claim 16, wherein said data content edit is a valid 2 personal identification number (PIN) for a valid taxpayer identification number (TIN).
- 1 23. A system for facilitating the input of tax data into a computer, said tax 2 data including one or more data entries, comprising:
- control logic configured to request that a user enter said data entries
 into one or more data entry fields;
- 5 control logic configured to receive said data entries from said data 6 entry fields; and
- 7 control logic configured to determine whether one or more of said data 8 entries satisfies a corresponding validity criterion.

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- 1 24. The system of claim 23, further comprising control logic configured to 2 notify said user if one of said data entries does not satisfy a validity criterion 3 corresponding to said data entry.
- 1 25. The system of claim 24, further comprising control logic configured to receive a new data entry to replace one of said data entries.
 - 26. The system of claim 23, wherein said control logic configured to determine whether one or more of said data entries satisfies a corresponding validity criterion is executed as each of said data entries is received.
- The system of claim 23, wherein said control logic configured to
 determine whether one or more of said data entries satisfies a corresponding validity
 criterion is executed after all of said data entries are received.
- 1 28. The system of claim 23, wherein a validity criterion corresponding to 2 at least one of said data entries is pre-defined.
- 1 29. The system of claim 23, wherein a validity criterion corresponding to 2 at least one of said data entries is dependent upon another of said data entries.





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FIG. 2

BE Header	BE Data
212	214

Business Event 210

FIG. 3

Transmission	Business	Business		Business
Header	Event	Event		Event
312	210	210	•••	210

Remote Message Block (RMB) 310

FIG. 4

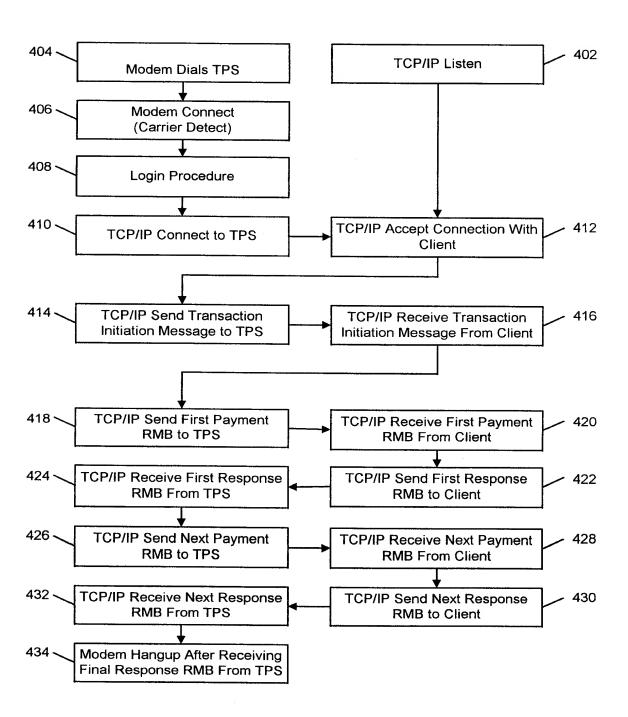
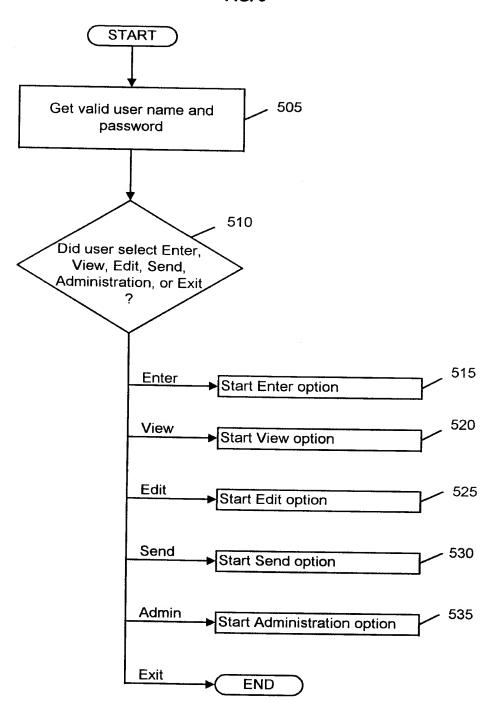
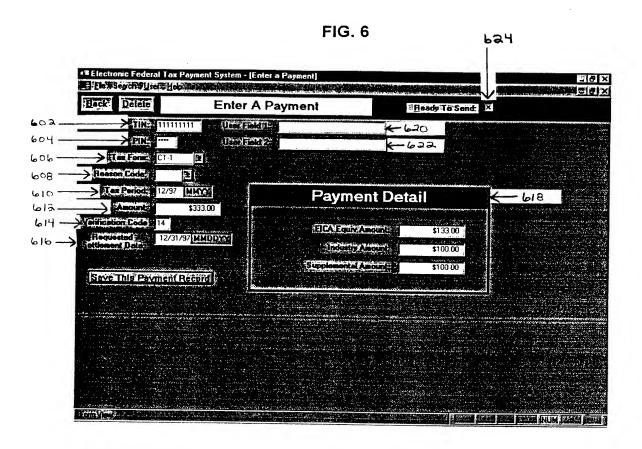


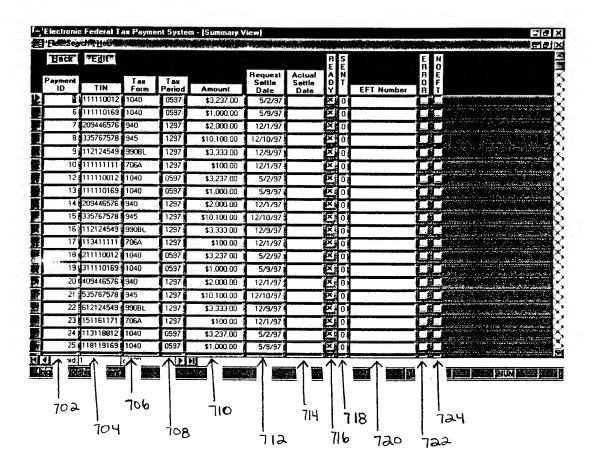
FIG. 5





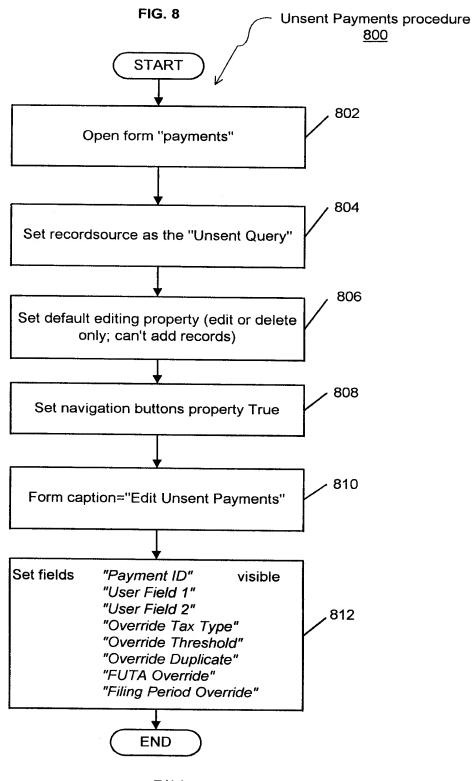
Enter Payments screen 600

FIG. 7



Summary View screen 700

WO 99/09504



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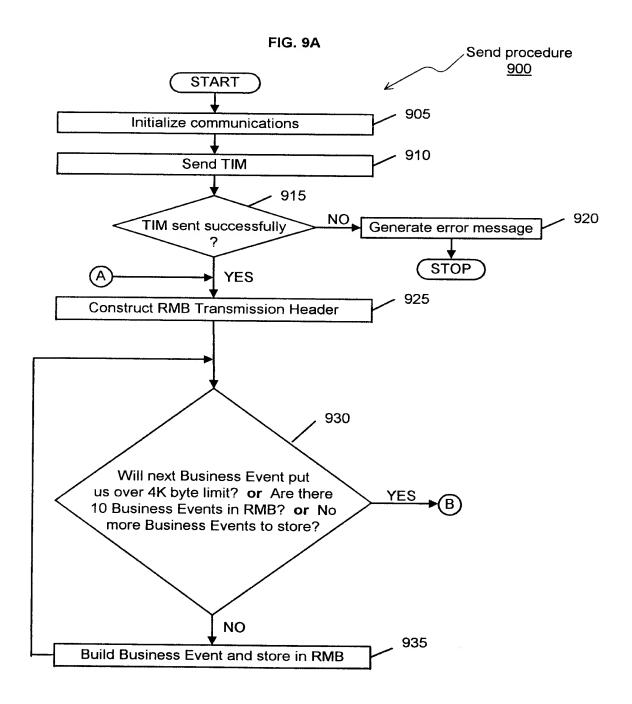
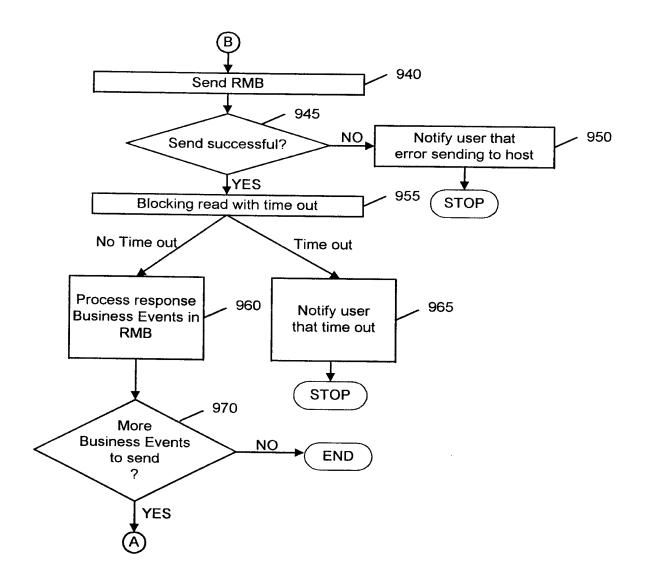
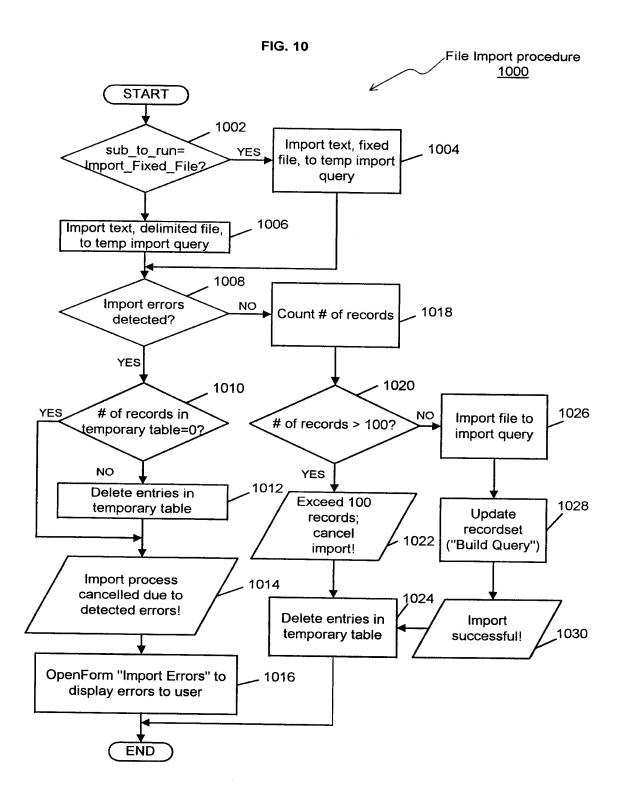
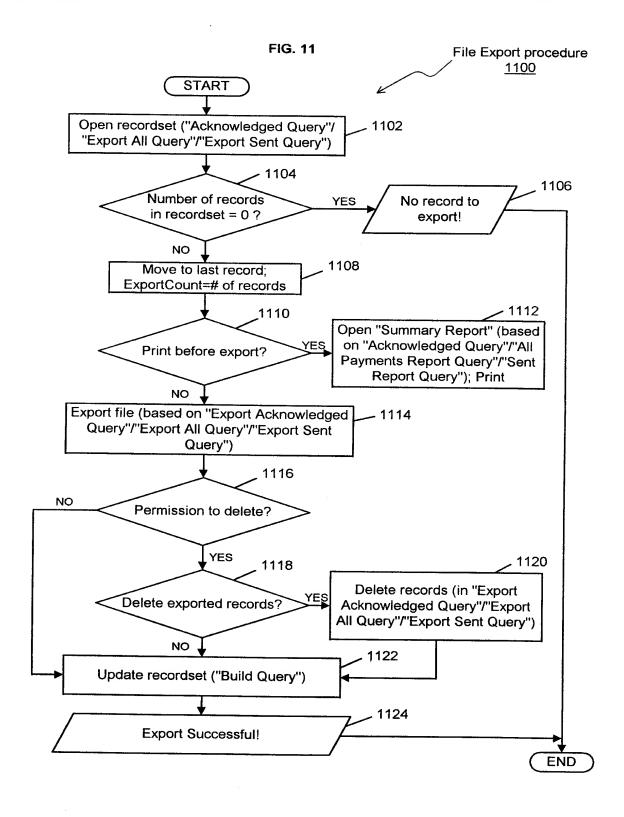


FIG. 9B







INTERNATIONAL SEARCH REPORT

In tional Application No

			(1/05 98/16/41
A. CLASSI IPC 6	FICATION OF SUBJECT MATTER G06F17/60		
According to	o International Patent Classification (iPC) or to both national classifica	ition and IPC	
	SEARCHED		
Minimum do IPC 6	ocumentation searched (classification system followed by classificatio $G06F$	n symbols)	
Documentat	ion searched other than minimum documentation to the extent that su	uch documents are include	d in the fields searched
Electronic d	ata base consulted during the international search (name of data bas	e and, where practical, se	arch terms used)
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the rele	vant passages	Relevant to claim No.
Х	"Our fifth annual 1040 tax prep ACCOUNTING TECHNOLOGY, NOV. 1996, & GRAY, USA,	face-off" FAULKNER	1-29
X	vol. 12, no. 10, pages 20-76, XP ISSN 0883-1866 see page 30, column 2, line 21 - see page 32, column 2, line 27 - line 14 see page 33, column 2, line 23 - line 14	line 43 column 3, column 3, ftware	1-29
	no. 84, pages 132-133, XP00208820 ISSN 0956-5248 see page 132 - page 133 	61	
χ Furth	er documents are listed in the continuation of box C.	Patent family me	nbers are listed in annex.
	egories of cited documents : If defining the general state of the art which is not	T" later document publish or priority date and no	ed after the international filling date t in conflict with the application but
"E" earlier de filing da	need to be of particular relevance ocument but published on or after the international tte "" It which may throw doubts on priority claim(s) or	cited to understand the invention X" document of particular cannot be considered	e principle or theory underlying the relevance; the claimed invention novel or cannot be considered to ep when the document is taken alone
"O" documer other m	s cited to establish the publication date of another or other special reason (as specified) nt referring to an oral disclosure, use, exhibition or leans nt published prior to the international filling date but	Y" document of particular cannot be considered document is combine ments, such combina in the art.	relevance; the claimed invention to involve an inventive step when the d with one or more other such docu- ion being obvious to a person skilled
	ctual completion of the international search	&" document member of t Date of mailing of the	ne same patent family nternational search report
16	December 1998	12/01/199	·
Name and m	alling address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Suenderma	nn, R

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INTERNATIONAL SEARCH REPORT

In Ational Application No
PCT/US 98/16741

ategory °	Citation of documents with indication where consequents of the relevant	In.
alegory 3	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HOWLETT D: "Death and taxes tax software reviews" WHAT PERSONAL COMPUTER, AUG. 1997, EMAP COMPUTING, UK, no. 97, pages 96-97, XP002088262 ISSN 0956-5248 see page 96 - page 97	1-29
A	SCOTT R W: "Don't fret over Web tax prep" ACCOUNTING TECHNOLOGY, JULY 1997, FAULKNER & GRAY, USA, vol. 13, no. 6, page 14, 16 XP002088263 ISSN 0883-1866 see page 14 - page 16	1,23

1

DERWENT-ACC-NO: 1999-190254

DERWENT-WEEK: 199929

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TITLE: Entry of tax data into computer system for

facilitating interactive entry and validation of data prior to electronic submission to a tax

system

INVENTOR: DONLAVAGE L H; MASON M; TAYLOR S

PATENT-ASSIGNEE: FIRST DATA CORP[FIRSN]

PRIORITY-DATA: 1997US-915073 (August 20, 1997)

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE

WO 9909504 A1 February 25, 1999 EN AU 9887808 A March 8, 1999 EN

DESIGNATED-STATES: AL AM AT AU AZ BA BB BG BR BY CA CH

CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW A T BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA

PT SD SE SZ UG ZW

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL- DATE
WO1999009504A1	N/A	1998WO- US16741	August 11, 1998
AU 9887808A	Based on	1998AU- 087808	August 11, 1998

INT-CL-CURRENT:

TYPE IPC DATE

CIPS G06Q40/00 20060101

ABSTRACTED-PUB-NO: WO 9909504 A1

BASIC-ABSTRACT:

NOVELTY - A communications module is used to transmit payment data to the electronic tax authority, such as the Electronic Federal Tax Payment System (EFTPS) in the USA, and then receives confirmation or error message in response.

DESCRIPTION - User is requested to enter data entries into the data entry fields, and determining on reception of data entries whether they satisfy corresponding validity criterion. The user is then notified whether the results satisfy the validity criterion.

USE - For facilitating interactive entry and validation of data prior to electronic submission to tax system, such as EFTPS, using personal computer.

ADVANTAGE - Provides system that interactively accepts and validates data input comprising tax payment transactions, views and edits previously entered data input comprising tax payment transactions.

DESCRIPTION OF DRAWING(S) - Drawing shows high level diagram of an embodiment of electronic tax payment system in which invention might operate.

CHOSEN-DRAWING: Dwg.1/11

TITLE-TERMS: ENTER TAX DATA COMPUTER SYSTEM

FACILITATE INTERACT VALID PRIOR

ELECTRONIC

DERWENT-CLASS: T01 T05 W01

EPI-CODES: T01-H07C5E; T01-J05A; T01-J05A1; T05-L02; W01-

A06B7; W01-C05B3C;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: 1999-139160